

SCORE Search Results Details for Application 09757788 and Search Result 20070122_145823_us-09-757-788a-1.rag.

Score Home	Retrieve Application	SCORE System	SCORE	Comments /
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This page gives you Search Results detail for the Application 09757788 and Search Result 20070122_145823_us-09-757-788a-1.rag.

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OM protein - protein search, using sw model

Run on: January 23, 2007, 03:12:39 ; Search time 199 Seconds
(without alignments)
89.605 Million cell updates/sec

Title: US-09-757-788A-1
Perfect score: 41
Sequence: 1 HXXGXFTXDXXXXXXXXXXXXXFIXXXXXXXXXXXXXXXXXX 39

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2589679 seqs, 457216429 residues

Total number of hits satisfying chosen parameters: 2589679

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : A_Geneseq_8:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
9: geneseqp2005s:*
10: geneseqp2006s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	%		DB	ID	Description
		Query	Match Length			
1	36	87.8	28	3	ADM40109	Adm40109 Human glu
2	36	87.8	28	3	ADM40104	Adm40104 Human glu
3	36	87.8	29	3	ADM40102	Adm40102 Human glu
4	36	87.8	29	3	ADM40101	Adm40101 Human glu
5	35	85.4	28	3	ADM40105	Adm40105 Human glu
6	35	85.4	28	3	ADM40111	Adm40111 Human glu
7	35	85.4	28	3	ADM40110	Adm40110 Human glu
8	35	85.4	29	3	ADM40097	Adm40097 Human glu
9	35	85.4	29	3	ADM40120	Adm40120 Human glu
10	35	85.4	29	3	ADM40100	Adm40100 Human glu
11	35	85.4	29	3	ADM40099	Adm40099 Human glu
12	35	85.4	29	3	ADM40103	Adm40103 Human glu
13	35	85.4	30	3	ADM40090	Adm40090 Human glu
14	35	85.4	30	3	ADM40092	Adm40092 Human glu
15	34	82.9	28	3	ADM40108	Adm40108 Human glu
16	34	82.9	28	3	ADM40119	Adm40119 Human glu
17	34	82.9	28	3	ADM40115	Adm40115 Human glu
18	34	82.9	29	3	ADM40117	Adm40117 Human glu
19	34	82.9	29	3	ADM40118	Adm40118 Human glu
20	34	82.9	29	3	ADM40113	Adm40113 Human glu
21	34	82.9	29	3	ADM40116	Adm40116 Human glu
22	34	82.9	29	3	ADM40112	Adm40112 Human glu
23	34	82.9	30	3	ADM40091	Adm40091 Human glu
24	34	82.9	30	3	ADM40096	Adm40096 Human glu
25	34	82.9	30	3	ADM40093	Adm40093 Human glu
26	33	80.5	28	9	AEB45991	Aeb45991 Glucagon-
27	33	80.5	28	9	AEB45989	Aeb45989 Glucagon-
28	33	80.5	28	9	AEB46017	Aeb46017 Glucagon-
29	33	80.5	28	9	AEB46015	Aeb46015 Glucagon-
30	33	80.5	29	3	ADM40114	Adm40114 Human glu
31	33	80.5	29	9	AEB45992	Aeb45992 Glucagon-
32	33	80.5	29	9	AEB45985	Aeb45985 Glucagon-
33	33	80.5	29	9	AEB46016	Aeb46016 Glucagon-
34	33	80.5	29	9	AEB45993	Aeb45993 Glucagon-
35	33	80.5	30	2	AAy80321	Aay80321 Glucagon
36	33	80.5	30	8	ADR00568	Adr00568 Human ins
37	33	80.5	30	8	ADR00563	Adr00563 Human ins
38	33	80.5	30	9	ADV92801	Adv92801 GLP-1 pep
39	33	80.5	30	9	AEB46020	Aeb46020 Glucagon-
40	33	80.5	31	2	AAW03894	Aaw03894 Glucagon
41	33	80.5	31	2	AAW03901	Aaw03901 Glucagon
42	33	80.5	31	2	AAW03877	Aaw03877 Glucagon
43	33	80.5	31	2	AAW03902	Aaw03902 Glucagon
44	33	80.5	31	4	AAG63295	Aag63295 An insolu
45	33	80.5	31	4	AAG63296	Aag63296 An insolu
46	33	80.5	31	4	AAE09270	Aae09270 Human glu
47	33	80.5	31	9	ADV92794	Adv92794 GLP-1 pep
48	33	80.5	37	9	AEB98196	Aeb98196 Human glu
49	32	78.0	24	3	AAy78956	Aay78956 Glucagon-
50	32	78.0	25	3	AAy78955	Aay78955 Glucagon-
51	32	78.0	26	3	AAy78954	Aay78954 Glucagon-
52	32	78.0	27	2	AAR65215	Aar65215 Glucagon-
53	32	78.0	27	3	AAy78953	Aay78953 Glucagon-
54	32	78.0	27	7	ADD71225	Add71225 Glucagon-
55	32	78.0	27	9	ADV25333	Adv25333 Human glu
56	32	78.0	28	2	AAR45437	Aar45437 Insulinot

57	32	78.0	28	2	AAR63249	Aar63249	Insulinot
58	32	78.0	28	2	AAW16669	Aaw16669	Tetradeca
59	32	78.0	28	2	AAW02644	Aaw02644	Glucagon-
60	32	78.0	28	2	AAR98950	Aar98950	Target pe
61	32	78.0	28	2	AAW93527	Aaw93527	Peptide u
62	32	78.0	28	3	AAAY78952	Aay78952	Glucagon-
63	32	78.0	28	3	AAAY83147	Aay83147	Glucagon-
64	32	78.0	28	3	AAAY88347	Aay88347	Glucagon-
65	32	78.0	28	3	AAB07295	Aab07295	Modified
66	32	78.0	28	4	AAG63270	Aag63270	Amino aci
67	32	78.0	28	4	AAG63273	Aag63273	An insolu
68	32	78.0	28	4	AAE09258	Aae09258	Human glu
69	32	78.0	28	5	ABB07145	Abb07145	Glucagon-
70	32	78.0	28	5	AAM50395	Aam50395	Glucagon-
71	32	78.0	28	5	AAM50397	Aam50397	Glucagon-
72	32	78.0	28	6	ABP98130	Abp98130	Amino aci
73	32	78.0	28	7	ADD71223	Add71223	Truncated
74	32	78.0	28	8	ADK15873	Adk15873	Glucagon-
75	32	78.0	28	8	ADL24417	Adl24417	GLP-1 pep
76	32	78.0	28	9	ADV25332	Adv25332	Human glu
77	32	78.0	28	9	ADZ80145	Adz80145	Modified
78	32	78.0	28	9	AEB45988	Aeb45988	Glucagon-
79	32	78.0	28	9	AEB45984	Aeb45984	Glucagon-
80	32	78.0	28	9	AEB46018	Aeb46018	Glucagon-
81	32	78.0	28	9	AEB45986	Aeb45986	Glucagon-
82	32	78.0	28	9	AEB46004	Aeb46004	Glucagon-
83	32	78.0	28	9	AEB46001	Aeb46001	Glucagon-
84	32	78.0	28	9	AEB45987	Aeb45987	Glucagon-
85	32	78.0	28	10	AEF04384	Aef04384	Human tru
86	32	78.0	28	10	AEF04387	Aef04387	Human tru
87	32	78.0	28	10	AEF04388	Aef04388	Human tru
88	32	78.0	28	10	AEF04382	Aef04382	Human tru
89	32	78.0	29	2	AAR24524	Aar24524	GLP-1 der
90	32	78.0	29	2	AAR45436	Aar45436	Insulinot
91	32	78.0	29	2	AAR63248	Aar63248	Insulinot
92	32	78.0	29	2	AAR69075	Aar69075	Glycogen
93	32	78.0	29	2	AAR98964	Aar98964	GLP1(7-35
94	32	78.0	29	2	AAW63181	Aaw63181	GLP-1(7-3
95	32	78.0	29	2	AAW50904	Aaw50904	Glucagon-
96	32	78.0	29	2	AAAY18038	Aay18038	GLP-1(7-3
97	32	78.0	29	2	AAAY34197	Aay34197	GLP-1 mut
98	32	78.0	29	2	AAAY39811	Aay39811	Glucagon-
99	32	78.0	29	3	AAAY78951	Aay78951	Glucagon-
100	32	78.0	29	3	AAAY53279	Aay53279	Glucagon-

ALIGNMENTS

RESULT 1

ADM40109

ID ADM40109 standard; peptide; 28 AA.

XX

AC ADM40109;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human glucagon-like peptide (GLP)-1 analogue SeqID102.

XX

KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;

KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;

KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;
 KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
 KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
 KW osteoporosis; central nervous system disease; restenosis;
 KW neurodegeneration; diabetes type I; diabetes type II;
 KW renal heart failure; congestive heart failure; nephrotic syndrome;
 KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
 KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
 KW mutein.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 13
 FT /note= "Wild-type Tyr replaced by 3-Pal (3-
 FT Pyridylalanine)"
 FT Misc-difference 14
 FT /note= "Wild-type Leu replaced by Ala"
 FT Misc-difference 16
 FT /note= "Wild-type Gly replaced by Ala"
 FT Misc-difference 17
 FT /note= "Wild-type Gln replaced by Ala"
 FT Misc-difference 21
 FT /note= "Wild-type Glu replaced by Ala"
 FT Modified-site 25
 FT /note= "Wild-type Trp replaced by 3-Pal (3-
 FT Pyridylalanine)"
 FT Modified-site 27
 FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric
 FT -acid)"
 FT Modified-site 28
 FT /note= "C-terminal amide"
 XX
 PN WO200034332-A1.
 XX
 PD 15-JUN-2000.
 XX
 PF 07-DEC-1999; 99WO-US028929.
 XX
 PR 07-DEC-1998; 98US-00206833.
 PR 07-DEC-1998; 98US-0111186P.
 XX
 PA (TULA) TULANE EDUCATIONAL FUND.
 PA (SCRC) SOC CONSEILS RECH & APPL SCI.
 XX
 PI Dong ZX, Coy DH;
 XX
 DR WPI; 2000-423382/36.
 XX
 PT Novel analogs of human glucagon-like peptide-1, useful for treatment of
 PT e.g. diabetes types I or II, have better metabolic stability than the
 PT native peptide.
 XX
 PS Claim 7; SEQ ID NO 102; 41pp; English.
 XX
 CC This invention relates to novel analogues of glucagon-like peptide-1 (GLP
 CC -1) and their salts. The invention may be useful for the production of
 CC compounds with an antidiabetic, anorectic, anti-arthritic,
 CC antiproliferative, neuroprotective, antidiabetic, hepatotropic,
 CC antiinflammatory, hypotensive, anabolic, osteopathic or nephrotropic

CC activity acting as GLP-1 receptor agonists; they increase the release of
 CC insulin and reduce secretion of glucagon, normalising glucose levels. The
 CC invention may be useful for the treatment of obesity, glucagonomas,
 CC secretory disorders of the airway, metabolic disorders, arthritis,
 CC osteoporosis, central nervous system disease, restenosis,
 CC neurodegeneration and, especially, diabetes types I and II, also renal
 CC and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
 CC edema, hypertension and diseases requiring a reduction in food intake.
 CC Also some of the analogues have an antagonist effect at the GLP-1
 CC receptor and can be used to treat hypoglycaemia and malabsorption
 CC syndrome associated with gastectomy or small bowel resection. The
 CC analogues of the invention are metabolically more stable than native GLP-
 CC 1 so have longer in vivo half-life. The present sequence is that of a
 CC human GLP-1 peptide analogue of the invention.

XX

SQ Sequence 28 AA;

Query Match 87.8%; Score 36; DB 3; Length 28;
 Best Local Similarity 34.8%; Pred. No. 0.19;
 Matches 8; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | | . ||
 Db 1 HAEGTFTSDVSSXAEAAAKAFI 23

RESULT 2

ADM40104

ID ADM40104 standard; peptide; 28 AA.

XX

AC ADM40104;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human glucagon-like peptide (GLP)-1 analogue SeqID97.

XX

KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;
 KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;
 KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;
 KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
 KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
 KW osteoporosis; central nervous system disease; restenosis;
 KW neurodegeneration; diabetes type I; diabetes type II;
 KW renal heart failure; congestive heart failure; nephrotic syndrome;
 KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
 KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
 KW mutein.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT Modified-site 13

FT /note= "Wild-type Tyr replaced by 3-Pal (3-Pyridylalanine)"

FT Misc-difference 16

FT /note= "Wild-type Gly replaced by Ala"

FT Misc-difference 17

FT /note= "Wild-type Gln replaced by Ala"

FT Misc-difference 20

FT /note= "Wild-type Lys replaced by Ala"

FT Misc-difference 21
 FT /note= "Wild-type Glu replaced by Ala"
 FT Modified-site 25
 FT /note= "Wild-type Trp replaced by 3-Pal (3-Pyridylalanine)"
 FT Modified-site 27
 FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric acid)"
 FT Modified-site 28
 FT /note= "C-terminal amide"
 XX
 PN WO200034332-A1.
 XX
 PD 15-JUN-2000.
 XX
 PF 07-DEC-1999; 99WO-US028929.
 XX
 PR 07-DEC-1998; 98US-00206833.
 PR 07-DEC-1998; 98US-0111186P.
 XX
 PA (TULA) TULANE EDUCATIONAL FUND.
 PA (SCRC) SOC CONSEILS RECH & APPL SCI.
 XX
 PI Dong ZX, Coy DH;
 XX
 DR WPI; 2000-423382/36.
 XX
 PT Novel analogs of human glucagon-like peptide-1, useful for treatment of
 PT e.g. diabetes types I or II, have better metabolic stability than the
 PT native peptide.
 XX
 PS Claim 7; SEQ ID NO 97; 41pp; English.
 XX
 CC This invention relates to novel analogues of glucagon-like peptide-1 (GLP
 CC -1) and their salts. The invention may be useful for the production of
 CC compounds with an antidiabetic, anorectic, anti-arthritic,
 CC antiproliferative, neuroprotective, antidiabetic, hepatotropic,
 CC antiinflammatory, hypotensive, anabolic, osteopathic or nephrotropic
 CC activity acting as GLP-1 receptor agonists; they increase the release of
 CC insulin and reduce secretion of glucagon, normalising glucose levels. The
 CC invention may be useful for the treatment of obesity, glucagonomas,
 CC secretory disorders of the airway, metabolic disorders, arthritis,
 CC osteoporosis, central nervous system disease, restenosis,
 CC neurodegeneration and, especially, diabetes types I and II, also renal
 CC and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
 CC edema, hypertension and diseases requiring a reduction in food intake.
 CC Also some of the analogues have an antagonist effect at the GLP-1
 CC receptor and can be used to treat hypoglycaemia and malabsorption
 CC syndrome associated with gastectomy or small bowel resection. The
 CC analogues of the invention are metabolically more stable than native GLP-
 CC 1 so have longer in vivo half-life. The present sequence is that of a
 CC human GLP-1 peptide analogue of the invention.
 XX
 SQ Sequence 28 AA;

Query Match 87.8%; Score 36; DB 3; Length 28;
 Best Local Similarity 34.8%; Pred. No. 0.19;
 Matches 8; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | | ||

Db 1 HAEGTFTSDVSSXLEAAAAAFI 23

RESULT 3

ADM40102

ID ADM40102 standard; peptide; 29 AA.

XX

AC ADM40102;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human glucagon-like peptide (GLP)-1 analogue SeqID95.

XX

KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;

KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;

KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;

KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;

KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;

KW osteoporosis; central nervous system disease; restenosis;

KW neurodegeneration; diabetes type I; diabetes type II;

KW renal heart failure; congestive heart failure; nephrotic syndrome;

KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;

KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;

KW mutein.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT Modified-site 13

FT /note= "Wild-type Tyr replaced by 3-Pal (3-Pyridylalanine)"

FT Misc-difference 16

FT /note= "Wild-type Gly replaced by Ala"

FT Misc-difference 17

FT /note= "Wild-type Gln replaced by Ala"

FT Misc-difference 20

FT /note= "Wild-type Lys replaced by Ala"

FT Misc-difference 21

FT /note= "Wild-type Glu replaced by Ala"

FT Modified-site 25

FT /note= "Wild-type Trp replaced by 3-Pal (3-Pyridylalanine)"

FT Modified-site 28

FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric acid)"

FT Modified-site 29

FT /note= "C-terminal amide"

XX

PN WO200034332-A1.

XX

PD 15-JUN-2000.

XX

PF 07-DEC-1999; 99WO-US028929.

XX

PR 07-DEC-1998; 98US-00206833.

PR 07-DEC-1998; 98US-0111186P.

XX

PA (TULA) TULANE EDUCATIONAL FUND.

PA (SCRC) SOC CONSEILS RECH & APPL SCI.

XX

PI Dong ZX, Coy DH;
 XX
 DR WPI; 2000-423382/36.
 XX
 PT Novel analogs of human glucagon-like peptide-1, useful for treatment of
 PT e.g. diabetes types I or II, have better metabolic stability than the
 PT native peptide.
 XX
 PS Claim 7; SEQ ID NO 95; 41pp; English.
 XX
 CC This invention relates to novel analogues of glucagon-like peptide-1 (GLP
 CC -1) and their salts. The invention may be useful for the production of
 CC compounds with an antidiabetic, anorectic, anti-arthritic,
 CC antiproliferative, neuroprotective, antidiabetic, hepatotropic,
 CC antiinflammatory, hypotensive, anabolic, osteopathic or nephrotropic
 CC activity acting as GLP-1 receptor agonists; they increase the release of
 CC insulin and reduce secretion of glucagon, normalising glucose levels. The
 CC invention may be useful for the treatment of obesity, glucagonomas,
 CC secretory disorders of the airway, metabolic disorders, arthritis,
 CC osteoporosis, central nervous system disease, restenosis,
 CC neurodegeneration and, especially, diabetes types I and II, also renal
 CC and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
 CC edema, hypertension and diseases requiring a reduction in food intake.
 CC Also some of the analogues have an antagonist effect at the GLP-1
 CC receptor and can be used to treat hypoglycaemia and malabsorption
 CC syndrome associated with gastectomy or small bowel resection. The
 CC analogues of the invention are metabolically more stable than native GLP-
 CC 1 so have longer in vivo half-life. The present sequence is that of a
 CC human GLP-1 peptide analogue of the invention.
 XX
 SQ Sequence 29 AA;

Query Match 87.8%; Score 36; DB 3; Length 29;
 Best Local Similarity 34.8%; Pred. No. 0.2;
 Matches 8; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | | | | | |
 Db 1 HAEGTFTSDVSSXLEAAAAAFI 23

RESULT 4

ADM40101

ID ADM40101 standard; peptide; 29 AA.

XX

AC ADM40101;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human glucagon-like peptide (GLP)-1 analogue SeqID94.

XX

KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;
 KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;
 KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;
 KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
 KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
 KW osteoporosis; central nervous system disease; restenosis;
 KW neurodegeneration; diabetes type I; diabetes type II;
 KW renal heart failure; congestive heart failure; nephrotic syndrome;
 KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
 KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;

KW mutein.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 13
 FT /note= "Wild-type Tyr replaced by 3-Pal (3-Pyridylalanine)"
 FT
 FT Misc-difference 15
 FT /note= "Wild-type Glu replaced by Ala"
 FT Misc-difference 16
 FT /note= "Wild-type Gly replaced by Ala"
 FT Misc-difference 17
 FT /note= "Wild-type Gln replaced by Ala"
 FT Misc-difference 21
 FT /note= "Wild-type Glu replaced by Ala"
 FT Modified-site 25
 FT /note= "Wild-type Trp replaced by 3-Pal (3-Pyridylalanine)"
 FT
 FT Modified-site 28
 FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric-acid)"
 FT
 FT Modified-site 29
 FT /note= "C-terminal amide"
 XX
 PN WO200034332-A1.
 XX
 PD 15-JUN-2000.
 XX
 PF 07-DEC-1999; 99WO-US028929.
 XX
 PR 07-DEC-1998; 98US-00206833.
 PR 07-DEC-1998; 98US-0111186P.
 XX
 PA (TULA) TULANE EDUCATIONAL FUND.
 PA (SCRC) SOC CONSEILS RECH & APPL SCI.
 XX
 PI Dong ZX, Coy DH;
 XX
 DR WPI; 2000-423382/36.
 XX
 PT Novel analogs of human glucagon-like peptide-1, useful for treatment of
 PT e.g. diabetes types I or II, have better metabolic stability than the
 PT native peptide.
 XX
 PS Claim 7; SEQ ID NO 94; 41pp; English.
 XX
 CC This invention relates to novel analogues of glucagon-like peptide-1 (GLP
 CC -1) and their salts. The invention may be useful for the production of
 CC compounds with an antidiabetic, anorectic, anti-arthritic,
 CC antiproliferative, neuroprotective, antidiabetic, hepatotropic,
 CC antiinflammatory, hypotensive, anabolic, osteopathic or nephrotropic
 CC activity acting as GLP-1 receptor agonists; they increase the release of
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CC Also some of the analogues have an antagonist effect at the GLP-1
 CC receptor and can be used to treat hypoglycaemia and malabsorption
 CC syndrome associated with gastectomy or small bowel resection. The
 CC analogues of the invention are metabolically more stable than native GLP-
 CC 1 so have longer in vivo half-life. The present sequence is that of a
 CC human GLP-1 peptide analogue of the invention.

XX

SQ Sequence 29 AA;

Query Match 87.8%; Score 36; DB 3; Length 29;
 Best Local Similarity 34.8%; Pred. No. 0.2;
 Matches 8; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | | | | | | |
 Db 1 HAEGTFTSDVSSXLAAAAAKAFI 23

RESULT 5

ADM40105

ID ADM40105 standard; peptide; 28 AA.

XX

AC ADM40105;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human glucagon-like peptide (GLP)-1 analogue SeqID98.

XX

KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;

KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;

KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;

KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;

KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;

KW osteoporosis; central nervous system disease; restenosis;

KW neurodegeneration; diabetes type I; diabetes type II;

KW renal heart failure; congestive heart failure; nephrotic syndrome;

KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;

KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;

KW mutein.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT Modified-site 13

FT /note= "Wild-type Tyr replaced by 3-Pal (3-
 FT Pyridylalanine)"

FT Misc-difference 16

FT /note= "Wild-type Gly replaced by Ala"

FT Misc-difference 17

FT /note= "Wild-type Gln replaced by Ala"

FT Misc-difference 21

FT /note= "Wild-type Glu replaced by Ala"

FT Misc-difference 25

FT /note= "Wild-type Trp replaced by Ala"

FT Modified-site 25

FT /note= "Wild-type Trp replaced by 3-Pal (3-
 FT Pyridylalanine)"

FT Modified-site 27

FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric
 FT -acid)"

FT Modified-site 28
 FT /note= "C-terminal amide"
 XX
 PN WO200034332-A1.
 XX
 PD 15-JUN-2000.
 XX
 PF 07-DEC-1999; 99WO-US028929.
 XX
 PR 07-DEC-1998; 98US-00206833.
 PR 07-DEC-1998; 98US-0111186P.
 XX
 PA (TULA) TULANE EDUCATIONAL FUND.
 PA (SCRC) SOC CONSEILS RECH & APPL SCI.
 XX
 PI Dong ZX, Coy DH;
 XX
 DR WPI; 2000-423382/36.
 XX
 PT Novel analogs of human glucagon-like peptide-1, useful for treatment of
 PT e.g. diabetes types I or II, have better metabolic stability than the
 PT native peptide.
 XX
 PS Claim 7; SEQ ID NO 98; 41pp; English.
 XX
 CC This invention relates to novel analogues of glucagon-like peptide-1 (GLP
 CC -1) and their salts. The invention may be useful for the production of
 CC compounds with an antidiabetic, anorectic, anti-arthritic,
 CC antiproliferative, neuroprotective, antidiabetic, hepatotropic,
 CC antiinflammatory, hypotensive, anabolic, osteopathic or nephrotropic
 CC activity acting as GLP-1 receptor agonists; they increase the release of
 CC insulin and reduce secretion of glucagon, normalising glucose levels. The
 CC invention may be useful for the treatment of obesity, glucagonomas,
 CC secretory disorders of the airway, metabolic disorders, arthritis,
 CC osteoporosis, central nervous system disease, restenosis,
 CC neurodegeneration and, especially, diabetes types I and II, also renal
 CC and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
 CC edema, hypertension and diseases requiring a reduction in food intake.
 CC Also some of the analogues have an antagonist effect at the GLP-1
 CC receptor and can be used to treat hypoglycaemia and malabsorption
 CC syndrome associated with gastectomy or small bowel resection. The
 CC analogues of the invention are metabolically more stable than native GLP-
 CC 1 so have longer in vivo half-life. The present sequence is that of a
 CC human GLP-1 peptide analogue of the invention.
 XX
 SQ Sequence 28 AA;

Query Match 85.4%; Score 35; DB 3; Length 28;
 Best Local Similarity 34.8%; Pred. No. 0.34;
 Matches 8; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | | ||
 Db 1 HAEGTFTSDVSSXLEAAAKAFI 23

RESULT 6

ADM40111

ID ADM40111 standard; peptide; 28 AA.

XX

AC ADM40111;

XX
 DT 03-JUN-2004 (first entry)
 XX
 DE Human glucagon-like peptide (GLP)-1 analogue SeqID104.
 XX
 KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;
 KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;
 KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;
 KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
 KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
 KW osteoporosis; central nervous system disease; restenosis;
 KW neurodegeneration; diabetes type I; diabetes type II;
 KW renal heart failure; congestive heart failure; nephrotic syndrome;
 KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
 KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
 KW mutein.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 11
 FT /note= "Wild-type Ser replaced by Ala"
 FT Modified-site 13
 FT /note= "Wild-type Tyr replaced by 3-Pal (3-
 FT Pyridylalanine)"
 FT Misc-difference 16
 FT /note= "Wild-type Gly replaced by Ala"
 FT Misc-difference 17
 FT /note= "Wild-type Gln replaced by Ala"
 FT Misc-difference 21
 FT /note= "Wild-type Glu replaced by Ala"
 FT Modified-site 25
 FT /note= "Wild-type Trp replaced by 3-Pal (3-
 FT Pyridylalanine)"
 FT Modified-site 27
 FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric
 FT -acid)"
 FT Modified-site 28
 FT /note= "C-terminal amide"
 XX
 PN WO200034332-A1.
 XX
 PD 15-JUN-2000.
 XX
 PF 07-DEC-1999; 99WO-US028929.
 XX
 PR 07-DEC-1998; 98US-00206833.
 PR 07-DEC-1998; 98US-0111186P.
 XX
 PA (TULA) TULANE EDUCATIONAL FUND.
 PA (SCRC) SOC CONSEILS RECH & APPL SCI.
 XX
 PI Dong ZX, Coy DH;
 XX
 DR WPI; 2000-423382/36.
 XX
 PT Novel analogs of human glucagon-like peptide-1, useful for treatment of
 PT e.g. diabetes types I or II, have better metabolic stability than the
 PT native peptide.
 XX

PS Claim 7; SEQ ID NO 104; 41pp; English.

XX

CC This invention relates to novel analogues of glucagon-like peptide-1 (GLP-1) and their salts. The invention may be useful for the production of compounds with an antidiabetic, anorectic, anti-arthritic, antiproliferative, neuroprotective, antidiabetic, hepatotropic, antiinflammatory, hypotensive, anabolic, osteopathic or nephrotropic activity acting as GLP-1 receptor agonists; they increase the release of insulin and reduce secretion of glucagon, normalising glucose levels. The invention may be useful for the treatment of obesity, glucagonomas, secretory disorders of the airway, metabolic disorders, arthritis, osteoporosis, central nervous system disease, restenosis, neurodegeneration and, especially, diabetes types I and II, also renal and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary edema, hypertension and diseases requiring a reduction in food intake. Also some of the analogues have an antagonist effect at the GLP-1 receptor and can be used to treat hypoglycaemia and malabsorption syndrome associated with gastectomy or small bowel resection. The analogues of the invention are metabolically more stable than native GLP-1 so have longer in vivo half-life. The present sequence is that of a human GLP-1 peptide analogue of the invention.

XX

SQ Sequence 28 AA;

Query Match 85.4%; Score 35; DB 3; Length 28;

Best Local Similarity 34.8%; Pred. No. 0.34;

Matches 8; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23

| | | | | | |

Db 1 HAEGTFTSDVASXLEAAAKAFI 23

RESULT 7

ADM40110

ID ADM40110 standard; peptide; 28 AA.

XX

AC ADM40110;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human glucagon-like peptide (GLP)-1 analogue SeqID103.

XX

KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;

KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;

KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;

KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;

KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;

KW osteoporosis; central nervous system disease; restenosis;

KW neurodegeneration; diabetes type I; diabetes type II;

KW renal heart failure; congestive heart failure; nephrotic syndrome;

KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;

KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;

KW mutein.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT Modified-site 13

FT /note= "Wild-type Tyr replaced by 3-Pal (3-

FT Pyridylalanine)"

FT Misc-difference 16

FT /note= "Wild-type Glu replaced by Ala"

FT Misc-difference 17

FT /note= "Wild-type Gln replaced by Ala"

FT Misc-difference 21

FT /note= "Wild-type Glu replaced by Ala"

FT Modified-site 25

FT /note= "Wild-type Trp replaced by 3-Pal (3-Pyridylalanine)"

FT Modified-site 27

FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric-acid)"

FT Modified-site 28

FT /note= "C-terminal amide"

XX

PN WO200034332-A1.

XX

PD 15-JUN-2000.

XX

PF 07-DEC-1999; 99WO-US028929.

XX

PR 07-DEC-1998; 98US-00206833.

PR 07-DEC-1998; 98US-0111186P.

XX

PA (TULA) TULANE EDUCATIONAL FUND.

PA (SCRC) SOC CONSEILS RECH & APPL SCI.

XX

PI Dong ZX, Coy DH;

XX

DR WPI; 2000-423382/36.

XX

PT Novel analogs of human glucagon-like peptide-1, useful for treatment of

PT e.g. diabetes types I or II, have better metabolic stability than the

PT native peptide.

XX

PS Claim 7; SEQ ID NO 103; 41pp; English.

XX

CC This invention relates to novel analogues of glucagon-like peptide-1 (GLP

CC -1) and their salts. The invention may be useful for the production of

CC compounds with an antidiabetic, anorectic, anti-arthritis,

CC antiproliferative, neuroprotective, antidiabetic, hepatotropic,

CC antiinflammatory, hypotensive, anabolic, osteopathic or nephrotropic

CC activity acting as GLP-1 receptor agonists; they increase the release of

CC insulin and reduce secretion of glucagon, normalising glucose levels. The

CC invention may be useful for the treatment of obesity, glucagonomas,

CC secretory disorders of the airway, metabolic disorders, arthritis,

CC osteoporosis, central nervous system disease, restenosis,

CC neurodegeneration and, especially, diabetes types I and II, also renal

CC and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary

CC edema, hypertension and diseases requiring a reduction in food intake.

CC Also some of the analogues have an antagonist effect at the GLP-1

CC receptor and can be used to treat hypoglycaemia and malabsorption

CC syndrome associated with gastectomy or small bowel resection. The

CC analogues of the invention are metabolically more stable than native GLP-

CC 1 so have longer in vivo half-life. The present sequence is that of a

CC human GLP-1 peptide analogue of the invention.

XX

SQ Sequence 28 AA;

Query Match 85.4%; Score 35; DB 3; Length 28;

Best Local Similarity 34.8%; Pred. No. 0.34;
 Matches 8; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | | | | | |
 Db 1 HAEGTFTSDVSSXLEAAAKAFI 23

RESULT 8

ADM40097

ID ADM40097 standard; peptide; 29 AA.

XX

AC ADM40097;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human glucagon-like peptide (GLP)-1 analogue SeqID90.

XX

KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritis;

KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;

KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;

KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;

KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;

KW osteoporosis; central nervous system disease; restenosis;

KW neurodegeneration; diabetes type I; diabetes type II;

KW renal heart failure; congestive heart failure; nephrotic syndrome;

KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;

KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;

KW mutein.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT Modified-site 13

FT /note= "Wild-type Tyr replaced by 3-Pal (3-Pyridylalanine)"

FT Misc-difference 16

FT /note= "Wild-type Gly replaced by Ala"

FT Misc-difference 17

FT /note= "Wild-type Gln replaced by Ala"

FT Misc-difference 21

FT /note= "Wild-type Glu replaced by Ala"

FT Modified-site 25

FT /note= "Wild-type Trp replaced by 3-Pal (3-Pyridylalanine)"

FT Modified-site 28

FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric-acid)"

FT Modified-site 29

FT /note= "C-terminal amide"

XX

PN W0200034332-A1.

XX

PD 15-JUN-2000.

XX

PF 07-DEC-1999; 99WO-US028929.

XX

PR 07-DEC-1998; 98US-00206833.

PR 07-DEC-1998; 98US-0111186P.

XX

PA (TULA) TULANE EDUCATIONAL FUND.
 PA (SCRC) SOC CONSEILS RECH & APPL SCI.
 XX
 PI Dong ZX, Coy DH;
 XX
 DR WPI; 2000-423382/36.
 XX
 PT Novel analogs of human glucagon-like peptide-1, useful for treatment of
 PT e.g. diabetes types I or II, have better metabolic stability than the
 PT native peptide.
 XX
 PS Claim 7; SEQ ID NO 90; 41pp; English.
 XX
 CC This invention relates to novel analogues of glucagon-like peptide-1 (GLP
 CC -1) and their salts. The invention may be useful for the production of
 CC compounds with an antidiabetic, anorectic, anti-arthritis,
 CC antiproliferative, neuroprotective, antidiabetic, hepatotropic,
 CC antiinflammatory, hypotensive, anabolic, osteopathic or nephrotropic
 CC activity acting as GLP-1 receptor agonists; they increase the release of
 CC insulin and reduce secretion of glucagon, normalising glucose levels. The
 CC invention may be useful for the treatment of obesity, glucagonomas,
 CC secretory disorders of the airway, metabolic disorders, arthritis,
 CC osteoporosis, central nervous system disease, restenosis,
 CC neurodegeneration and, especially, diabetes types I and II, also renal
 CC and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
 CC edema, hypertension and diseases requiring a reduction in food intake.
 CC Also some of the analogues have an antagonist effect at the GLP-1
 CC receptor and can be used to treat hypoglycaemia and malabsorption
 CC syndrome associated with gastectomy or small bowel resection. The
 CC analogues of the invention are metabolically more stable than native GLP-
 CC 1 so have longer in vivo half-life. The present sequence is that of a
 CC human GLP-1 peptide analogue of the invention.
 XX
 SQ Sequence 29 AA;

Query Match 85.4%; Score 35; DB 3; Length 29;
 Best Local Similarity 34.8%; Pred. No. 0.35;
 Matches 8; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | . | | | | | |
 Db 1 HAEGTFTSDVSSXLEAAAKAFI 23

RESULT 9

ADM40120

ID ADM40120 standard; peptide; 29 AA.

XX

AC ADM40120;

XX

DT 03-JUN-2004 (first entry)

XX

DE Human glucagon-like peptide (GLP)-1 analogue SeqID113.

XX

KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritis;

KW antiproliferative; neuroprotective; antidiabetic; hepatotropic;

KW antiinflammatory; hypotensive; anabolic; osteopathic; nephrotropic;

KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;

KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis;

KW osteoporosis; central nervous system disease; restenosis;

KW neurodegeneration; diabetes type I; diabetes type II;

KW renal heart failure; congestive heart failure; nephrotic syndrome;
 KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
 KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
 KW mutein.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Modified-site 10
 FT /note= "Wild-type Val replaced by Tle"
 FT Misc-difference 11
 FT /note= "Wild-type Ser replaced by Ala"
 FT Misc-difference 12
 FT /note= "Wild-type Ser replaced by Ala"
 FT Modified-site 13
 FT /note= "Wild-type Tyr replaced by 3-Pal (3-
 FT Pyridylalanine)"
 FT Modified-site 14
 FT /note= "Wild-type Leu replaced by Tle"
 FT Misc-difference 16
 FT /note= "Wild-type Gly replaced by Ala"
 FT Misc-difference 17
 FT /note= "Wild-type Gln replaced by Ala"
 FT Misc-difference 21
 FT /note= "Wild-type Glu replaced by Ala"
 FT Modified-site 25
 FT /note= "Wild-type Trp replaced by 3-Pal (3-
 FT Pyridylalanine)"
 FT Modified-site 28
 FT /note= "Wild-type Val replaced by Gaba (gabaamino-butyric
 FT -acid)"
 FT Modified-site 29
 FT /note= "C-terminal amide"
 XX
 PN W0200034332-A1.
 XX
 PD 15-JUN-2000.
 XX
 PF 07-DEC-1999; 99WO-US028929.

[start](#) | [next page](#)

SCORE 1.3 BuildDate: 11/17/2006

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GenCore version 5.1.9
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OM protein - protein search, using sw model

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Run on:      January 23, 2007, 03:13:34 ; Search time 300 Seconds
              (without alignments)
              120.252 Million cell updates/sec
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Title:      US-09-757-788A-1
Perfect score: 41
Sequence:   1 HXXGXFTXDXXXXXXXXXXXXXXXXXXXXXFIXXXXXXXXXXXXXXXXXXXX 39
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2849598 seqs, 925015592 residues

Total number of hits satisfying chosen parameters: 2849598

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Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 100 summaries
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Database :      UniProt_7.2:*
           1:  uniprot_sprot:*
           2:  uniprot_trembl:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	%					
No.	Score	Query	Match	Length	DB	ID
						Description
1	32	78.0	45	2	Q6PPF4	CAPHI
2	32	78.0	176	1	GLUC	SHEEP
3	32	78.0	180	1	GLUC	BOVIN

4	32	78.0	180	1	GLUC_CANFA	P29794	c glucagon
5	32	78.0	180	1	GLUC_CAVPO	P05110	c glucagon
6	32	78.0	180	1	GLUC_HUMAN	P01275	h glucagon
7	32	78.0	180	1	GLUC_MESAU	P01273	m glucagon
8	32	78.0	180	1	GLUC_MOUSE	P55095	m glucagon
9	32	78.0	180	1	GLUC_OCTDE	P22890	o glucagon
10	32	78.0	180	1	GLUC_PIG	P01274	s glucagon
11	32	78.0	180	1	GLUC_RAT	P06883	r glucagon
12	32	78.0	180	2	Q53TP6_HUMAN	Q53tp6	homo sapien
13	32	78.0	180	2	Q3T0X0_BOVIN	Q3t0x0	bos taurus
14	32	78.0	180	2	Q3UFE9_MOUSE	Q3ufe9	mus musculu
15	31	75.6	103	1	GLUC_RANCA	P15438	rana catesb
16	31	75.6	149	2	Q6RYB2_BUFMA	Q6ryb2	bufo marinu
17	31	75.6	160	1	GLUC1_PETMA	Q9pur1	petromyzon
18	31	75.6	219	1	GLUC2_XENLA	O42144	xenopus lae
19	31	75.6	219	2	Q5D082_XENLA	Q5d082	xenopus lae
20	31	75.6	220	2	Q8UWL9_9NEOB	Q8uwl9	hoplobatrac
21	31	75.6	266	1	GLUC1_XENLA	O42143	xenopus lae
22	31	75.6	266	2	Q6DIZ4_XENTR	Q6diz4	xenopus tro
23	31	75.6	298	2	Q6FIP5_CANGA	Q6fip5	candida gla
24	30	73.2	29	1	GLUC_ALLMI	P68954	alligator m
25	30	73.2	29	1	GLUC_ANAPL	P68952	anas platyr
26	30	73.2	29	1	GLUC_CAMDR	P68273	camelus dro
27	30	73.2	29	1	GLUC_CHIBR	P31297	chinchilla
28	30	73.2	29	1	GLUC_DIDMA	P18108	didelphis m
29	30	73.2	29	1	GLUC_LAMFL	Q9prq9	lampetra fl
30	30	73.2	29	1	GLUC_MELGA	P68260	meleagris g
31	30	73.2	29	1	GLUC_RABIT	P68274	oryctolagus
32	30	73.2	29	1	GLUC_SAISC	P68275	saimiri sci
33	30	73.2	29	1	GLUC_STRCA	P68953	struthio ca
34	30	73.2	29	1	GLUC_TORMA	P09567	torpedo mar
35	30	73.2	29	1	GLUC_TRASC	P68955	trachemys s
36	30	73.2	30	2	Q7LZN3_POLSP	Q7lzn3	polyodon sp
37	30	73.2	39	1	EXE3_HELHO	P20394	heloderma h
38	30	73.2	62	1	GLUC_SCYCA	P09687	scyliorhinu
39	30	73.2	87	2	Q7SZU6_HELHR	Q7szu6	heloderma h
40	30	73.2	96	1	GLUC_MYOSC	P09686	myoxocephal
41	30	73.2	96	2	Q9DG43_AMBRU	Q9dg43	ambloplites
42	30	73.2	120	1	GLUC2_PETMA	Q9pur0	petromyzon
43	30	73.2	121	2	Q6RYC1_9PERC	Q6ryc1	sebastes ca
44	30	73.2	124	1	GLUC1_LOPAM	P01278	lophius ame
45	30	73.2	124	2	Q4S308_TETNG	Q4s308	tetraodon n
46	30	73.2	124	2	Q6RYB1_9SAUR	Q6ryb1	agkistrodon
47	30	73.2	151	2	Q3HLJ2_MELGA	Q3hlj2	meleagris g
48	30	73.2	151	2	Q3HWX1_CHICK	Q3hwx1	gallus gall
49	30	73.2	155	1	YKFB_ECOLI	P77162	escherichia
50	30	73.2	176	2	Q6RYB0_9PERC	Q6ryb0	sebastes ca
51	30	73.2	176	2	Q6RYC2_9PERC	Q6ryc2	sebastes ca
52	30	73.2	204	1	GLUC_HEL SU	O12956	h glucagon
53	30	73.2	206	1	GLUC_CHICK	P68259	g glucagon
54	30	73.2	206	2	Q3HLJ1_MELGA	Q3hlj1	meleagris g
55	30	73.2	206	2	Q3HWX0_CHICK	Q3hwx0	gallus gall
56	30	73.2	280	2	Q4FMT9_PELUB	Q4fmt9	pelagibacte
57	30	73.2	381	2	Q3WA76_9ACTO	Q3wa76	frankia sp.
58	29	70.7	71	1	GLUC ICTPU	P04093	ictalurus p
59	29	70.7	71	1	GLUC_PIA ME	P81880	piaractus m
60	29	70.7	72	1	VIP_CAVPO	P04566	cavia porce
61	29	70.7	72	1	VIP_PIG	P01284	sus scrofa
62	29	70.7	72	1	VIP_RABIT	P32649	oryctolagus
63	29	70.7	75	1	GLUC_AMICA	P33528	amia calva
64	29	70.7	78	1	GLUC_LEPSP	P09566	lepisosteus

65	29	70.7	87	1	EXE4_HELISU	P26349	heloderma s
66	29	70.7	118	2	Q5TCY7_HUMAN	Q5tcy7	homo sapien
67	29	70.7	121	2	Q5PR39_BRARE	Q5pr39	brachydanio
68	29	70.7	122	2	Q6RYB8 ICTPU	Q6ryb8	ictalurus p
69	29	70.7	145	2	Q7M2Y9_MACFA	Q7m2y9	macaca fasc
70	29	70.7	153	2	Q7TSR4_9MURI	Q7tsr4	arvicanthis
71	29	70.7	169	2	Q5TCY8_HUMAN	Q5tcy8	homo sapien
72	29	70.7	170	1	VIP_BOVIN	P81401	bos taurus
73	29	70.7	170	1	VIP_HUMAN	P01282	homo sapien
74	29	70.7	170	1	VIP_MOUSE	P32648	mus musculu
75	29	70.7	170	1	VIP_RAT	P01283	rattus norv
76	29	70.7	170	2	Q5TCY9_HUMAN	Q5tcy9	homo sapien
77	29	70.7	172	2	Q41ZP7_DESHA	Q41zp7	desulfitoba
78	29	70.7	173	2	Q6RYB9 ICTPU	Q6ryb9	ictalurus p
79	29	70.7	178	1	GLUC1_ONCMY	Q91971	oncorhynchu
80	29	70.7	178	1	GLUC2_ONCMY	Q91189	oncorhynchu
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82	29	70.7	206	1	Y4923_STRCO	Q9ewv6	streptomyce
83	29	70.7	208	2	Q41W24_DESHA	Q41w24	desulfitoba
84	29	70.7	253	2	Q8EN29_OCEIH	Q8en29	oceanobacil
85	29	70.7	256	2	Q33JK3_METHU	Q33jk3	methanospir
86	29	70.7	258	2	Q491Y3_BLOPB	Q491y3	blochmannia
87	29	70.7	262	1	TPIS_BLOFL	Q7vrl0	blochmannia
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90	29	70.7	355	1	GPA12_CAEBR	Q613v4	caenorhabdi
91	29	70.7	355	1	GPA12_CAEEL	Q19572	caenorhabdi
92	29	70.7	415	2	Q420K0_DESHA	Q420k0	desulfitoba
93	29	70.7	770	2	Q4Q6F9_LEIMA	Q4q6f9	leishmania
94	29	70.7	1215	2	Q4P9B0_USTMA	Q4p9b0	ustilago ma
95	29	70.7	1258	2	Q9SSP0_ARATH	Q9ssp0	arabidopsis
96	28	68.3	30	1	GLUCL_ANGAN	P63294	anguilla an
97	28	68.3	30	1	GLUCL_ANGRO	P63295	anguilla ro
98	28	68.3	31	2	Q7LZN2_POLSP	Q7lzn2	polyodon sp
99	28	68.3	31	2	Q7LZN4_POLSP	Q7lzn4	polyodon sp
100	28	68.3	66	2	Q788W6_ONCTS	Q788w6	oncorhynchu

ALIGNMENTS

RESULT 1

Q6PPF4_CAPHI

ID Q6PPF4_CAPHI PRELIMINARY; PRT; 45 AA.

AC Q6PPF4;

DT 05-JUL-2004, integrated into UniProtKB/TrEMBL.

DT 05-JUL-2004, sequence version 1.

DT 07-FEB-2006, entry version 9.

DE Glucagon (Fragment).

OS Capra hircus (Goat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;

OC Pecora; Bovidae; Caprinae; Capra.

OX NCBI_TaxID=9925;

RN [1]

RP NUCLEOTIDE SEQUENCE.

RA Ballester M., Castello A., Ibanez E., Sanchez A., Folch J.M.;

RL Submitted (APR-2004) to the EMBL/GenBank/DDBJ databases.

CC

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CC -----
DR EMBL; AY588290; AAT00451.1; -; Genomic_DNA.
DR GO; GO:0005576; C:extracellular region; IEA.
DR GO; GO:0005179; F:hormone activity; IEA.
DR InterPro; IPR000532; Glucagon.
DR Pfam; PF00123; Hormone_2; 1.
DR PRINTS; PR00275; GLUCAGON.
DR SMART; SM00070; GLUCA; 1.
FT NON_TER      1      1
FT NON_TER      45     45
SQ SEQUENCE     45 AA;  5179 MW;  B538A926E9447F80 CRC64;

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Query Match          78.0%; Score 32; DB 2; Length 45;
Best Local Similarity 30.4%; Pred. No. 0.96;
Matches      7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
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Db      13 HAEGTFTSDVSSYLEGQAAKEFI 35

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RESULT 2

GLUC_SHEEP

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ID GLUC_SHEEP STANDARD; PRT; 176 AA.
AC Q8MJ25;
DT 11-OCT-2004, integrated into UniProtKB/Swiss-Prot.
DT 01-OCT-2002, sequence version 1.
DT 07-FEB-2006, entry version 16.
DE Glucagon precursor [Contains: Glicentin; Glicentin-related polypeptide
DE (GRPP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1
DE (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
DE peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)]
DE (Fragment).
GN Name=GCG;
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
OC Pecora; Bovidae; Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP NUCLEOTIDE SEQUENCE [MRNA].
RC TISSUE=Pancreas;
RA Limesand S.W., Hay W.W. Jr.;
RT "Characterization of the endocrine pancreas in an ovine placental
RT insufficiency IUGR fetus.";
RL Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
CC -!- FUNCTION: Glucagon plays a key role in glucose metabolism and
CC homeostasis. Regulates blood glucose by increasing gluconeogenesis
CC and decreasing glycolysis. A counterregulatory hormone of insulin,
CC raises plasma glucose levels in response to insulin-induced
CC hypoglycemia (By similarity).
CC -!- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
CC insulin release. Play important roles on gastric motility and the
CC suppression of plasma glucagon levels. May be involved in the
CC suppression of satiety and stimulation of glucose disposal in
CC peripheral tissues, independent of the actions of insulin. Have
CC growth-promoting activities on intestinal epithelium. May also
CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,
CC TSH, CRH, oxytocin, and vasopressin (By similarity).
CC -!- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
CC villus height in the small intestine, concomitant with increased

```

CC crypt cell proliferation and decreased enterocyte apoptosis. The
 CC gastrointestinal tract, from the stomach to the colon is the
 CC principal target for GLP-2 action. Plays a key role in nutrient
 CC homeostasis, enhancing nutrient assimilation through enhanced
 CC gastrointestinal function, as well as increasing nutrient
 CC disposal. Stimulates intestinal glucose transport and decreases
 CC mucosal permeability (By similarity).
 CC -!- FUNCTION: Oxyntomodulin significantly reduces food intake (By
 CC similarity).
 CC -!- FUNCTION: Glicentin may modulate gastric acid secretion and
 CC gastro-pyloro-duodenal activity.
 CC -!- SUBCELLULAR LOCATION: Secreted protein.
 CC -!- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the
 CC islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin
 CC are secreted from enteroendocrine cells throughout the
 CC gastrointestinal tract. GLP1 and GLP2 are also secreted in
 CC selected neurons in the brain.
 CC -!- INDUCTION: Glucagon release is stimulated by hypoglycemia and
 CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
 CC GLP-2 are induced in response to nutrient ingestion (By
 CC similarity).
 CC -!- PTM: Proglucagon is posttranslationally processed in a tissue-
 CC specific manner in pancreatic A cells and intestinal L cells. In
 CC pancreatic A cells, the major bioactive hormone is glucagon
 CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas (By
 CC similarity).
 CC -!- MISCELLANEOUS: GLP-2 does not have cleavage on a pair of basic
 CC residues at C-terminus as in other mammals.
 CC -!- SIMILARITY: Belongs to the glucagon family.
 CC -----
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 CC -----
 DR EMBL; AF529185; AAM94409.1; -; mRNA.
 DR InterPro; IPR000532; Glucagon.
 DR Pfam; PF00123; Hormone_2; 3.
 DR PRINTS; PR00275; GLUCAGON.
 DR SMART; SM00070; GLUCA; 3.
 DR PROSITE; PS00260; GLUCAGON; 4.
 KW Amidation; Cleavage on pair of basic residues; Hormone; Signal.
 FT SIGNAL 1 20
 FT PEPTIDE 21 89 Glicentin (By similarity).
 FT /FTId=PRO_0000011313.
 FT PEPTIDE 21 50 Glicentin-related polypeptide (By
 FT similarity).
 FT /FTId=PRO_0000011314.
 FT PEPTIDE 53 89 Oxyntomodulin (By similarity).
 FT /FTId=PRO_0000011315.
 FT PEPTIDE 53 81 Glucagon.
 FT /FTId=PRO_0000011316.
 FT PROPEP 84 89 By similarity.
 FT /FTId=PRO_0000011317.
 FT PEPTIDE 92 128 Glucagon-like peptide 1 (By similarity).
 FT /FTId=PRO_0000011318.
 FT PEPTIDE 98 128 Glucagon-like peptide 1(7-37) (By
 FT similarity).

FT				/FTId=PRO_0000011319.
FT	PEPTIDE	98	127	Glucagon-like peptide 1(7-36) (By
FT				similarity).
FT				/FTId=PRO_0000011320.
FT	PROPEP	131	145	By similarity.
FT				/FTId=PRO_0000011321.
FT	PEPTIDE	146	>176	Glucagon-like peptide 2 (By similarity).
FT				/FTId=PRO_0000011322.
FT	SITE	52	53	Cleavage (by PCSK2) (By similarity).
FT	SITE	83	84	Cleavage (by PCSK1 and PCSK2) (By
FT				similarity).
FT	SITE	91	92	Cleavage (by PCSK1) (By similarity).
FT	SITE	97	98	Cleavage (by PCSK1) (By similarity).
FT	SITE	130	131	Cleavage (by PCSK1) (By similarity).
FT	SITE	145	146	Cleavage (by PCSK1) (By similarity).
FT	MOD_RES	127	127	Arginine amide (G-128 provides amide
FT				group) (By similarity).
FT	NON_TER	176	176	
SQ	SEQUENCE	176 AA; 20336 MW; 13174039BD6CE2B3 CRC64;		

Query Match 78.0%; Score 32; DB 1; Length 176;
 Best Local Similarity 30.4%; Pred. No. 3.8;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
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 Db 98 HAEGTFTSDVSSYLEGQAAKEFI 120

RESULT 3

GLUC_BOVIN

ID GLUC_BOVIN STANDARD; PRT; 180 AA.
 AC P01272;
 DT 21-JUL-1986, integrated into UniProtKB/Swiss-Prot.
 DT 13-AUG-1987, sequence version 1.
 DT 07-FEB-2006, entry version 55.
 DE Glucagon precursor [Contains: Glicentin; Glicentin-related polypeptide
 DE (GRPP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1
 DE (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
 DE peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
 GN Name=GCG;
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
 OC Pecora; Bovidae; Bovinae; Bos.
 OX NCBI_TaxID=9913;
 RN [1]
 RP NUCLEOTIDE SEQUENCE [MRNA].
 RX MEDLINE=83299996; PubMed=6577439;
 RA Lopez L.C., Frazier M.L., Su C.-J., Kumar A., Saunders G.F.;
 RT "Mammalian pancreatic preproglucagon contains three glucagon-related
 RT peptides.";
 RL Proc. Natl. Acad. Sci. U.S.A. 80:5485-5489(1983).
 RN [2]
 RP PROTEIN SEQUENCE OF 53-81.
 RX MEDLINE=71166445; PubMed=5102927;
 RA Bromer W.W., Boucher M.E., Koffenberger J.E. Jr.;
 RT "Amino acid sequence of bovine glucagon.";
 RL J. Biol. Chem. 246:2822-2827(1971).
 RN [3]
 RP REVIEW.

RX MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
 RA Drucker D.J.;
 RT "Glucagon-like peptides: regulators of cell proliferation,
 RT differentiation, and apoptosis.";
 RL Mol. Endocrinol. 17:161-171(2003).
 RN [4]
 RP REVIEW.
 RX MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
 RA Jiang G., Zhang B.B.;
 RT "Glucagon and regulation of glucose metabolism.";
 RL Am. J. Physiol. 284:E671-E678(2003).
 RN [5]
 RP REVIEW.
 RX PubMed=10322410;
 RA Drucker D.J.;
 RT "Glucagon-like peptide 2.";
 RL Trends Endocrinol. Metab. 10:153-156(1999).
 RN [6]
 RP REVIEW.
 RX MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;
 RA Kieffer T.J., Habener J.F.;
 RT "The glucagon-like peptides.";
 RL Endocr. Rev. 20:876-913(1999).
 RN [7]
 RP STRUCTURE BY NMR OF 53-81.
 RX MEDLINE=71166445; PubMed=6631957;
 RA Braun W., Wider G., Lee K.H., Wuethrich K.;
 RT "Conformation of glucagon in a lipid-water interphase by 1H nuclear
 RT magnetic resonance.";
 RL J. Mol. Biol. 169:921-948(1983).
 CC -!- FUNCTION: Glucagon plays a key role in glucose metabolism and
 CC homeostasis. Regulates blood glucose by increasing gluconeogenesis
 CC and decreasing glycolysis. A counterregulatory hormone of insulin,
 CC raises plasma glucose levels in response to insulin-induced
 CC hypoglycemia (By similarity).
 CC -!- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
 CC insulin release. Play important roles on gastric motility and the
 CC suppression of plasma glucagon levels. May be involved in the
 CC suppression of satiety and stimulation of glucose disposal in
 CC peripheral tissues, independent of the actions of insulin. Have
 CC growth-promoting activities on intestinal epithelium. May also
 CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,
 CC TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
 CC mass through stimulation of islet neogenesis and pancreatic beta
 CC cell proliferation (By similarity).
 CC -!- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
 CC villus height in the small intestine, concomitant with increased
 CC crypt cell proliferation and decreased enterocyte apoptosis. The
 CC gastrointestinal tract, from the stomach to the colon is the
 CC principal target for GLP-2 action. Plays a key role in nutrient
 CC homeostasis, enhancing nutrient assimilation through enhanced
 CC gastrointestinal function, as well as increasing nutrient
 CC disposal. Stimulates intestinal glucose transport and decreases
 CC mucosal permeability (By similarity).
 CC -!- FUNCTION: Oxyntomodulin significantly reduces food intake (By
 CC similarity).
 CC -!- FUNCTION: Glicentin may modulate gastric acid secretion and
 CC gastro-pyloro-duodenal activity.
 CC -!- SUBCELLULAR LOCATION: Secreted protein.
 CC -!- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the
 CC islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin

CC are secreted from enteroendocrine cells throughout the
 CC gastrointestinal tract.
 CC -!- INDUCTION: Glucagon release is stimulated by hypoglycemia and
 CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
 CC GLP-2 are induced in response to nutrient ingestion (By
 CC similarity).
 CC -!- PTM: Proglucagon is posttranslationally processed in a tissue-
 CC specific manner in pancreatic A cells and intestinal L cells. In
 CC pancreatic A cells, the major bioactive hormone is glucagon
 CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas (By
 CC similarity).
 CC -!- SIMILARITY: Belongs to the glucagon family.
 CC -----
 CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
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 CC -----
 DR EMBL; K00107; AAA30538.1; -; mRNA.
 DR PDB; 1KX6; NMR; A=53-81.
 DR InterPro; IPR000532; Glucagon.
 DR Pfam; PF00123; Hormone_2; 3.
 DR PRINTS; PR00275; GLUCAGON.
 DR SMART; SM00070; GLUCA; 3.
 DR PROSITE; PS00260; GLUCAGON; 4.
 KW 3D-structure; Amidation; Cleavage on pair of basic residues;
 KW Direct protein sequencing; Hormone; Signal.
 FT SIGNAL 1 20
 FT PEPTIDE 21 89 Glicentin (By similarity).
 FT /FTId=PRO_0000011223.
 FT PEPTIDE 21 50 Glicentin-related polypeptide (By
 FT similarity).
 FT /FTId=PRO_0000011224.
 FT PEPTIDE 53 89 Oxyntomodulin (By similarity).
 FT /FTId=PRO_0000011225.
 FT PEPTIDE 53 81 Glucagon.
 FT /FTId=PRO_0000011226.
 FT PROPEP 84 89 By similarity.
 FT /FTId=PRO_0000011227.
 FT PEPTIDE 92 128 Glucagon-like peptide 1 (By similarity).
 FT /FTId=PRO_0000011228.
 FT PEPTIDE 98 128 Glucagon-like peptide 1(7-37) (By
 FT similarity).
 FT /FTId=PRO_0000011229.
 FT PEPTIDE 98 127 Glucagon-like peptide 1(7-36) (By
 FT similarity).
 FT /FTId=PRO_0000011230.
 FT PROPEP 131 145 By similarity.
 FT /FTId=PRO_0000011231.
 FT PEPTIDE 146 178 Glucagon-like peptide 2 (By similarity).
 FT /FTId=PRO_0000011232.
 FT SITE 52 53 Cleavage (by PCSK2) (By similarity).
 FT SITE 83 84 Cleavage (by PCSK1 and PCSK2) (By
 FT similarity).
 FT SITE 91 92 Cleavage (by PCSK1) (By similarity).
 FT SITE 97 98 Cleavage (by PCSK1) (By similarity).
 FT SITE 130 131 Cleavage (by PCSK1) (By similarity).
 FT SITE 145 146 Cleavage (by PCSK1) (By similarity).

FT MOD_RES 127 127 Arginine amide (G-128 provides amide
 FT group) (By similarity).
 FT TURN 60 64
 FT TURN 74 74
 FT HELIX 75 78
 SQ SEQUENCE 180 AA; 20944 MW; 8D9B4FF05B9F15FF CRC64;

Query Match 78.0%; Score 32; DB 1; Length 180;
 Best Local Similarity 30.4%; Pred. No. 3.9;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
 | | | | |
 Db 98 HAEGTFTSDVSSYLEGQAAKEFI 120

RESULT 4

GLUC_CANFA

ID GLUC_CANFA STANDARD; PRT; 180 AA.
 AC P29794; Q95LG0;
 DT 01-APR-1993, integrated into UniProtKB/Swiss-Prot.
 DT 15-MAR-2004, sequence version 2.
 DT 07-MAR-2006, entry version 39.
 DE Glucagon precursor [Contains: Glicentin; Glicentin-related polypeptide
 DE (GRPP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1
 DE (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
 DE peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
 GN Name=GCG;
 OS Canis familiaris (Dog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canidae;
 OC Canis.
 OX NCBI_TaxID=9615;
 RN [1]
 RP NUCLEOTIDE SEQUENCE [MRNA].
 RC TISSUE=Pancreas, and Stomach;
 RX PubMed=11916259;
 RA Irwin D.M.;
 RT "cDNA cloning of proglucagon from the stomach and pancreas of the
 RT dog.";
 RL DNA Seq. 12:253-260(2001).
 RN [2]
 RP PROTEIN SEQUENCE OF 21-89.
 RC TISSUE=Ileum;
 RX MEDLINE=89185675; PubMed=3238052; DOI=10.1016/0167-0115(88)90230-3;
 RA Shinomura Y., Eng J., Yalow R.S.;
 RT "Immunoreactive glucagons purified from dog pancreas, stomach and
 RT ileum.";
 RL Regul. Pept. 23:299-308(1988).
 RN [3]
 RP PROCESSING BY PCSK1 AND PCSK2.
 RX PubMed=10499540; DOI=10.1210/en.140.10.4800;
 RA Damholt A.B., Buchan A.M., Holst J.J., Kofod H.;
 RT "Proglucagon processing profile in canine L cells expressing
 RT endogenous prohormone convertase 1/3 and prohormone convertase 2.";
 RL Endocrinology 140:4800-4808(1999).
 RN [4]
 RP REVIEW.
 RX MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
 RA Drucker D.J.;
 RT "Glucagon-like peptides: regulators of cell proliferation,

RT differentiation, and apoptosis.";

RL Mol. Endocrinol. 17:161-171(2003).

RN [5]

RP REVIEW.

RX MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;

RA Jiang G., Zhang B.B.;

RT "Glucagon and regulation of glucose metabolism.";

RL Am. J. Physiol. 284:E671-E678(2003).

RN [6]

RP REVIEW.

RX PubMed=10322410;

RA Drucker D.J.;

RT "Glucagon-like peptide 2.";

RL Trends Endocrinol. Metab. 10:153-156(1999).

RN [7]

RP REVIEW.

RX MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;

RA Kieffer T.J., Habener J.F.;

RT "The glucagon-like peptides.";

RL Endocr. Rev. 20:876-913(1999).

CC -!- FUNCTION: Glucagon plays a key role in glucose metabolism and

CC homeostasis. Regulates blood glucose by increasing gluconeogenesis

CC and decreasing glycolysis. A counterregulatory hormone of insulin,

CC raises plasma glucose levels in response to insulin-induced

CC hypoglycemia (By similarity).

CC -!- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent

CC insulin release. Play important roles on gastric motility and the

CC suppression of plasma glucagon levels. May be involved in the

CC suppression of satiety and stimulation of glucose disposal in

CC peripheral tissues, independent of the actions of insulin. Have

CC growth-promoting activities on intestinal epithelium. May also

CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,

CC TSH, CRH, oxytocin, and vasopressin secretion. Increases islet

CC mass through stimulation of islet neogenesis and pancreatic beta

CC cell proliferation (By similarity).

CC -!- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates

CC villus height in the small intestine, concomitant with increased

CC crypt cell proliferation and decreased enterocyte apoptosis. The

CC gastrointestinal tract, from the stomach to the colon is the

CC principal target for GLP-2 action. Plays a key role in nutrient

CC homeostasis, enhancing nutrient assimilation through enhanced

CC gastrointestinal function, as well as increasing nutrient

CC disposal. Stimulates intestinal glucose transport and decreases

CC mucosal permeability (By similarity).

CC -!- FUNCTION: Oxyntomodulin significantly reduces food intake (By

CC similarity).

CC -!- FUNCTION: Glicentin may modulate gastric acid secretion and

CC gastro-pyloro-duodenal activity.

CC -!- SUBCELLULAR LOCATION: Secreted protein.

CC -!- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the

CC islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin

CC are secreted from enteroendocrine cells throughout the

CC gastrointestinal tract. GLP1 and GLP2 are also secreted in

CC selected neurons in the brain.

CC -!- INDUCTION: Glucagon release is stimulated by hypoglycemia and

CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and

CC GLP-2 are induced in response to nutrient ingestion (By

CC similarity).

CC -!- PTM: Proglucagon is posttranslationally processed in a tissue-

CC specific manner in pancreatic A cells and intestinal L cells. In

CC pancreatic A cells, the major bioactive hormone is glucagon

CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas (By
 CC similarity).
 CC -!- SIMILARITY: Belongs to the glucagon family.
 CC -----
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 CC -----
 DR EMBL; AF308439; AAL09425.1; -; mRNA.
 DR PIR; A60318; GCDG69.
 DR HSSP; P01274; 1GCN.
 DR Ensembl; ENSCAFG00000010414; Canis familiaris.
 DR InterPro; IPR000532; Glucagon.
 DR Pfam; PF00123; Hormone_2; 3.
 DR PRINTS; PR00275; GLUCAGON.
 DR SMART; SM00070; GLUCA; 3.
 DR PROSITE; PS00260; GLUCAGON; 4.
 KW Amidation; Cleavage on pair of basic residues;
 KW Direct protein sequencing; Hormone; Signal.
 FT SIGNAL 1 20
 FT PEPTIDE 21 89 Glicentin.
 FT /FTId=PRO_0000011233.
 FT PEPTIDE 21 50 Glicentin-related polypeptide (By
 FT similarity).
 FT /FTId=PRO_0000011234.
 FT PEPTIDE 53 89 Oxyntomodulin (By similarity).
 FT /FTId=PRO_0000011235.
 FT PEPTIDE 53 81 Glucagon (By similarity).
 FT /FTId=PRO_0000011236.
 FT PROPEP 84 89 By similarity.
 FT /FTId=PRO_0000011237.
 FT PEPTIDE 92 128 Glucagon-like peptide 1.
 FT /FTId=PRO_0000011238.
 FT PEPTIDE 98 128 Glucagon-like peptide 1(7-37).
 FT /FTId=PRO_0000011239.
 FT PEPTIDE 98 127 Glucagon-like peptide 1(7-36).
 FT /FTId=PRO_0000011240.
 FT PROPEP 131 145 By similarity.
 FT /FTId=PRO_0000011241.
 FT PEPTIDE 146 178 Glucagon-like peptide 2 (By similarity).
 FT /FTId=PRO_0000011242.
 FT SITE 52 53 Cleavage (by PCSK2).
 FT SITE 83 84 Cleavage (by PCSK1 and PCSK2).
 FT SITE 91 92 Cleavage (by PCSK1).
 FT SITE 97 98 Cleavage (by PCSK1).
 FT SITE 130 131 Cleavage (by PCSK1).
 FT SITE 145 146 Cleavage (by PCSK1).
 FT MOD_RES 127 127 Arginine amide (G-128 provides amide
 FT group) (By similarity).
 SQ SEQUENCE 180 AA; 21115 MW; 80F66941AFC324FD CRC64;

Query Match 78.0%; Score 32; DB 1; Length 180;
 Best Local Similarity 30.4%; Pred. No. 3.9;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | ||

Db 98 HAEGTFTSDVSSYLEGQAAKEFI 120

RESULT 5

GLUC_CAVPO

ID GLUC_CAVPO STANDARD; PRT; 180 AA.
 AC P05110;
 DT 13-AUG-1987, integrated into UniProtKB/Swiss-Prot.
 DT 13-AUG-1987, sequence version 1.
 DT 07-FEB-2006, entry version 48.
 DE Glucagon precursor [Contains: Glicentin; Glicentin-related polypeptide
 DE (GRPP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1
 DE (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
 DE peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
 GN Name=GCG;
 OS Cavia porcellus (Guinea pig).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
 OC Hystricognathi; Caviidae; Cavia.
 OX NCBI_TaxID=10141;
 RN [1]
 RP NUCLEOTIDE SEQUENCE [MRNA].
 RX MEDLINE=86248118; PubMed=3755107; DOI=10.1016/0014-5793(86)81429-6;
 RA Seino S., Welsh M., Bell G.I., Chan S.J., Steiner D.F.;
 RT "Mutations in the guinea pig preproglucagon gene are restricted to a
 RT specific portion of the prohormone sequence."
 RL FEBS Lett. 203:25-30(1986).
 RN [2]
 RP PROTEIN SEQUENCE OF 53-81.
 RX MEDLINE=86165412; PubMed=3956884;
 RA Huang C.G., Eng J., Pan Y.-C.E., Hulmes J.D., Yalow R.S.;
 RT "Guinea pig glucagon differs from other mammalian glucagons."
 RL Diabetes 35:508-512(1986).
 RN [3]
 RP PARTIAL PROTEIN SEQUENCE OF 53-89.
 RX MEDLINE=86017849; PubMed=4048553; DOI=10.1016/0167-0115(85)90203-4;
 RA Conlon J.M., Hansen H.F., Schwartz T.W.;
 RT "Primary structure of glucagon and a partial sequence of oxyntomodulin
 RT (glucagon-37) from the guinea pig."
 RL Regul. Pept. 11:309-320(1985).
 RN [4]
 RP REVIEW.
 RX MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
 RA Drucker D.J.;
 RT "Glucagon-like peptides: regulators of cell proliferation,
 RT differentiation, and apoptosis."
 RL Mol. Endocrinol. 17:161-171(2003).
 RN [5]
 RP REVIEW.
 RX MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
 RA Jiang G., Zhang B.B.;
 RT "Glucagon and regulation of glucose metabolism."
 RL Am. J. Physiol. 284:E671-E678(2003).
 RN [6]
 RP REVIEW.
 RX PubMed=10322410;
 RA Drucker D.J.;
 RT "Glucagon-like peptide 2."
 RL Trends Endocrinol. Metab. 10:153-156(1999).
 RN [7]
 RP REVIEW.

RX MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;
 RA Kieffer T.J., Habener J.F.;
 RT "The glucagon-like peptides."
 RL Endocr. Rev. 20:876-913(1999).
 CC -!- FUNCTION: Glucagon plays a key role in glucose metabolism and
 CC homeostasis. Regulates blood glucose by increasing gluconeogenesis
 CC and decreasing glycolysis. A counterregulatory hormone of insulin,
 CC raises plasma glucose levels in response to insulin-induced
 CC hypoglycemia (By similarity).
 CC -!- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
 CC insulin release. Play important roles on gastric motility and the
 CC suppression of plasma glucagon levels. May be involved in the
 CC suppression of satiety and stimulation of glucose disposal in
 CC peripheral tissues, independent of the actions of insulin. Have
 CC growth-promoting activities on intestinal epithelium. May also
 CC regulate the hypothalamic pituitary axis (HPA) via effects on LH,
 CC TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
 CC mass through stimulation of islet neogenesis and pancreatic beta
 CC cell proliferation (By similarity).
 CC -!- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
 CC villus height in the small intestine, concomitant with increased
 CC crypt cell proliferation and decreased enterocyte apoptosis. The
 CC gastrointestinal tract, from the stomach to the colon is the
 CC principal target for GLP-2 action. Plays a key role in nutrient
 CC homeostasis, enhancing nutrient assimilation through enhanced
 CC gastrointestinal function, as well as increasing nutrient
 CC disposal. Stimulates intestinal glucose transport and decreases
 CC mucosal permeability (By similarity).
 CC -!- FUNCTION: Oxyntomodulin significantly reduces food intake (By
 CC similarity).
 CC -!- FUNCTION: Glicentin may modulate gastric acid secretion and
 CC gastro-pyloro-duodenal activity (By similarity).
 CC -!- SUBCELLULAR LOCATION: Secreted protein.
 CC -!- INDUCTION: Glucagon release is stimulated by hypoglycemia and
 CC inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
 CC GLP-2 are induced in response to nutrient ingestion (By
 CC similarity).
 CC -!- PTM: Proglucagon is posttranslationally processed in a tissue-
 CC specific manner in pancreatic A cells and intestinal L cells. In
 CC pancreatic A cells, the major bioactive hormone is glucagon
 CC cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
 CC liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
 CC further N-terminally truncated by posttranslational processing in
 CC the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide.
 CC The C-terminal amidation is neither important for the metabolism
 CC of GLP-1 nor for its effects on the endocrine pancreas (By
 CC similarity).
 CC -!- SIMILARITY: Belongs to the glucagon family.
 CC -----
 CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
 CC Distributed under the Creative Commons Attribution-NoDerivs License
 CC -----
 DR EMBL; D00014; BAA00010.1; -; mRNA.
 DR PIR; A24856; GCGP.
 DR HSSP; P01275; 1D0R.
 DR InterPro; IPR000532; Glucagon.
 DR Pfam; PF00123; Hormone_2; 3.
 DR PRINTS; PR00275; GLUCAGON.
 DR SMART; SM00070; GLUCA; 3.
 DR PROSITE; PS00260; GLUCAGON; 4.
 KW Amidation; Cleavage on pair of basic residues;

KW Direct protein sequencing; Hormone; Signal.

FT	SIGNAL	1	20	
FT	PEPTIDE	21	89	Glicentin (By similarity).
FT				/FTId=PRO_0000011243.
FT	PEPTIDE	21	50	Glicentin-related polypeptide (By similarity).
FT				/FTId=PRO_0000011244.
FT	PEPTIDE	53	89	Oxyntomodulin.
FT				/FTId=PRO_0000011245.
FT	PEPTIDE	53	81	Glucagon.
FT				/FTId=PRO_0000011246.
FT	PROPEP	84	89	By similarity.
FT				/FTId=PRO_0000011247.
FT	PEPTIDE	92	128	Glucagon-like peptide 1 (By similarity).
FT				/FTId=PRO_0000011248.
FT	PEPTIDE	98	128	Glucagon-like peptide 1(7-37) (By similarity).
FT				/FTId=PRO_0000011249.
FT	PEPTIDE	98	127	Glucagon-like peptide 1(7-36) (By similarity).
FT				/FTId=PRO_0000011250.
FT	PROPEP	131	145	By similarity.
FT				/FTId=PRO_0000011251.
FT	PEPTIDE	146	178	Glucagon-like peptide 2 (By similarity).
FT				/FTId=PRO_0000011252.
FT	SITE	52	53	Cleavage (by PCSK2) (By similarity).
FT	SITE	83	84	Cleavage (by PCSK1 and PCSK2) (By similarity).
FT				
FT	SITE	91	92	Cleavage (by PCSK1) (By similarity).
FT	SITE	97	98	Cleavage (by PCSK1) (By similarity).
FT	SITE	130	131	Cleavage (by PCSK1) (By similarity).
FT	SITE	145	146	Cleavage (by PCSK1) (By similarity).
FT	MOD_RES	127	127	Arginine amide (G-128 provides amide group) (By similarity).
FT				
SQ	SEQUENCE	180 AA;	20972 MW;	702FB181161D2776 CRC64;

Query Match 78.0%; Score 32; DB 1; Length 180;
 Best Local Similarity 30.4%; Pred. No. 3.9;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
 | | | | | | |
 Db 98 HAEGTFTSDVSSYLEGQAAKEFI 120

RESULT 6

GLUC_HUMAN

ID GLUC_HUMAN STANDARD; PRT; 180 AA.
 AC P01275;
 DT 21-JUL-1986, integrated into UniProtKB/Swiss-Prot.
 DT 15-MAR-2004, sequence version 2.
 DT 21-FEB-2006, entry version 70.
 DE Glucagon precursor [Contains: Glicentin; Glicentin-related polypeptide (GRPP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1 (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
 GN Name=GCG;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.

OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=88330860; PubMed=2901414;
RA Drucker D.J., Asa S.;
RT "Glucagon gene expression in vertebrate brain.";
RL J. Biol. Chem. 263:13475-13478(1988).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=86259053; PubMed=3725587;
RA White J.W., Saunders G.F.;
RT "Structure of the human glucagon gene.";
RL Nucleic Acids Res. 14:4719-4730(1986).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Liver;
RX MEDLINE=83271477; PubMed=6877358;
RA Bell G.I., Sanchez-Pescador R., Laybourn P.J., Najarian R.C.;
RT "Exon duplication and divergence in the human preproglucagon gene.";
RL Nature 304:368-371(1983).
RN [4]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RA Kalnine N., Chen X., Rolfs A., Halleck A., Hines L., Eisenstein S.,
RA Koundinya M., Raphael J., Moreira D., Kelley T., LaBaer J., Lin Y.,
RA Phelan M., Farmer A.;
RT "Cloning of human full-length CDSs in BD Creator(TM) system donor
RT vector.";
RL Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
RN [5]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC TISSUE=Pancreas;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Ustin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [6]
RP PROTEIN SEQUENCE OF 53-81.
RX PubMed=11946536;
RA Thomsen J., Kristiansen K., Brunfeldt K., Sundby F.;
RT "The amino acid sequence of human glucagon.";
RL FEBS Lett. 21:315-319(1972).
RN [7]
RP PROTEIN SEQUENCE OF 98-127.
RX MEDLINE=89327238; PubMed=2753890;

RA Orskov C., Bersani M., Johnsen A.H., Hoejrup P., Holst J.J.;
 RT "Complete sequences of glucagon-like peptide-1 from human and pig
 RT small intestine.";
 RL J. Biol. Chem. 264:12826-12829(1989).
 RN [8]
 RP FUNCTION OF GLP1 BIOACTIVE FORMS.
 RX MEDLINE=93246081; PubMed=8482423;
 RA Orskov C., Wettergren A., Holst J.J.;
 RT "Biological effects and metabolic rates of glucagonlike peptide-1 7-36
 RT amide and glucagonlike peptide-1 7-37 in healthy subjects are
 RT indistinguishable.";
 RL Diabetes 42:658-661(1993).
 RN [9]
 RP FUNCTION OF OXYNTOMODULIN.
 RX MEDLINE=22919492; PubMed=14557443; DOI=10.1210/jc.2003-030421;
 RA Cohen M.A., Ellis S.M., Le Roux C.W., Batterham R.L., Park A.,
 RA Patterson M., Frost G.S., Ghatti M.A., Bloom S.R.;
 RT "Oxyntomodulin suppresses appetite and reduces food intake in
 RT humans.";
 RL J. Clin. Endocrinol. Metab. 88:4696-4701(2003).
 RN [10]
 RP FUNCTION OF GLICENTIN.
 RX MEDLINE=22993785; PubMed=14632334; DOI=10.1080/08035250310000514;
 RA Tadokoro R., Shimizu T., Hosaka A., Kaneko N., Satoh Y., Yamashiro Y.;
 RT "Postnatal and postprandial changes in plasma concentrations of
 RT glicentin in term and preterm infants.";
 RL Acta Paediatr. 92:1175-1179(2003).
 RN [11]
 RP PROCESSING BY PCSK2.
 RX MEDLINE=97431623; PubMed=9287128; DOI=10.1016/S0014-5793(97)00892-2;
 RA Rouille Y., Bianchi M., Irminger J.C., Halban P.A.;
 RT "Role of the prohormone convertase PC2 in the processing of
 RT proglucagon to glucagon.";
 RL FEBS Lett. 413:119-123(1997).
 RN [12]
 RP PROCESSING BY PCSK1.
 RX MEDLINE=22538931; PubMed=12651102; DOI=10.1016/S1046-5928(02)00653-8;
 RA Bonic A., Mackin R.B.;
 RT "Expression, purification, and PC1-mediated processing of human
 RT proglucagon, glicentin, and major proglucagon fragment.";
 RL Protein Expr. Purif. 28:15-24(2003).
 RN [13]
 RP REVIEW.
 RX PubMed=14719035; DOI=10.1139/y03-107;
 RA Brubaker P.L., Anini Y.;
 RT "Direct and indirect mechanisms regulating secretion of glucagon-like
 RT peptide-1 and glucagon-like peptide-2.";
 RL Can. J. Physiol. Pharmacol. 81:1005-1012(2003).
 RN [14]
 RP REVIEW.
 RX MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
 RA Drucker D.J.;
 RT "Glucagon-like peptides: regulators of cell proliferation,
 RT differentiation, and apoptosis.";
 RL Mol. Endocrinol. 17:161-171(2003).
 RN [15]
 RP REVIEW.
 RX MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
 RA Jiang G., Zhang B.B.;
 RT "Glucagon and regulation of glucose metabolism.";
 RL Am. J. Physiol. 284:E671-E678(2003).

RN [16]
 RP REVIEW.
 RX PubMed=10322410;
 RA Drucker D.J.;
 RT "Glucagon-like peptide 2.";
 RL Trends Endocrinol. Metab. 10:153-156(1999).
 RN [17]
 RP REVIEW.
 RX MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;
 RA Kieffer T.J., Habener J.F.;
 RT "The glucagon-like peptides.";
 RL Endocr. Rev. 20:876-913(1999).
 RN [18]
 RP X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS) OF 53-81.
 RX MEDLINE=98334683; PubMed=9667960; DOI=10.1021/jm980084a;
 RA Sturm N.S., Lin Y., Burley S.K., Krstenansky J.L., Ahn J.-M.,
 RA Azizeh B.Y., Trivedi D., Hruby V.J.;
 RT "Structure-function studies on positions 17, 18, and 21 replacement
 RT analogues of glucagon: the importance of charged residues and salt
 RT bridges in glucagon biological activity.";
 RL J. Med. Chem. 41:2693-2700(1998).
 RN [19]
 RP STRUCTURE BY NMR OF 98-127.
 RX MEDLINE=21940600; PubMed=11943215; DOI=10.1016/S0014-5793(02)02466-3;
 RA Chang X., Keller D., O'Donoghue S.I., Led J.J.;
 RT "NMR studies of the aggregation of glucagon-like peptide-1: formation
 RT of a symmetric helical dimer.";
 RL FEBS Lett. 515:165-170(2002).
 RN [20]
 RP STRUCTURE BY NMR OF GLUCAGON ANTAGONIST.
 RX MEDLINE=22515400; PubMed=12627948; DOI=10.1021/bi026629r;
 RA Ying J., Ahn J.-M., Jacobsen N.E., Brown M.F., Hruby V.J.;
 RT "NMR solution structure of the glucagon antagonist [desHis1, desPhe6,
 RT Glu9]glucagon amide in the presence of perdeuterated
 RT dodecylphosphocholine micelles.";
 RL Biochemistry 42:2825-2835(2003).
 CC -!- FUNCTION: Glucagon plays a key role in glucose metabolism and
 CC homeostasis. Regulates blood glucose by increasing gluconeogenesis
 CC and decreasing glycolysis. A counterregulatory hormone of insulin,
 CC raises plasma glucose levels in response to insulin-induced

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OM protein - protein search, using sw model

Run on: January 23, 2007, 03:17:09 ; Search time 37 Seconds
(without alignments)
101.418 Million cell updates/sec

Title: US-09-757-788A-1
Perfect score: 41
Sequence: 1 HXXGXFTXDXXXXXXXXXXXXXXFIXXXXXXXXXXXXXXXXXX 39

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : PIR_80:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	32	78.0	158	1 GCPG	glucagon precursor
2	32	78.0	180	1 GCBO	glucagon precursor
3	32	78.0	180	1 GCHY	glucagon precursor
4	32	78.0	180	1 GCGP	glucagon precursor
5	32	78.0	180	1 GCHU	glucagon precursor
6	32	78.0	180	1 GCRT	glucagon precursor
7	32	78.0	180	1 GCRTDU	glucagon precursor

8	32	78.0	180	2	A57294	glucagon precursor
9	31	75.6	101	1	GCFGB	glucagon precursor
10	30	73.2	29	1	A61583	glucagon - ostrich
11	30	73.2	29	1	GCCB	glucagon - Chinch
12	30	73.2	29	1	GCDF	glucagon - smaller
13	30	73.2	29	1	GCDK	glucagon - duck
14	30	73.2	29	1	GCOPV	glucagon - North A
15	30	73.2	29	1	GCTTS	glucagon - slider
16	30	73.2	29	2	A91740	glucagon - turkey
17	30	73.2	29	2	S07211	glucagon - marbled
18	30	73.2	29	2	C39258	glucagon - common
19	30	73.2	29	2	A91742	glucagon - Arabian
20	30	73.2	29	2	A91741	glucagon - rabbit
21	30	73.2	30	2	S44473	glucagon-like pept
22	30	73.2	39	1	HWGH3Z	exendin-3 - Mexica
23	30	73.2	69	1	GCDG69	glucagon-69 - dog
24	30	73.2	87	1	GCFIS	glucagon precursor
25	30	73.2	124	1	GCAF	glucagon 1 precurs
26	30	73.2	151	1	GCCH	glucagon precursor
27	30	73.2	155	2	B64750	ykfB protein - Esc
28	30	73.2	206	2	I51301	proglucagon - chic
29	29	70.7	29	2	C60840	glucagon I - Europ
30	29	70.7	29	2	S39018	glucagon - bowfin
31	29	70.7	36	2	D60840	glucagon II - Euro
32	29	70.7	39	1	HWGH4G	exendin-4 - Gila m
33	29	70.7	55	1	VRBO	vasoactive intesti
34	29	70.7	55	1	VRRB	vasoactive intesti
35	29	70.7	55	1	VRGP	vasoactive intesti
36	29	70.7	55	1	VRSH	vasoactive intesti
37	29	70.7	58	1	VRPG	vasoactive intesti
38	29	70.7	63	1	GCIDC	glucagon precursor
39	29	70.7	72	1	GCGXA	glucagon precursor
40	29	70.7	145	2	A60038	vasoactive intesti
41	29	70.7	170	1	VRHU	vasoactive intesti
42	29	70.7	170	1	VRRT	vasoactive intesti
43	29	70.7	170	2	A60037	vasoactive intesti
44	29	70.7	178	2	I51057	glucagon II precur
45	29	70.7	178	2	I51058	glucagon I precurs
46	29	70.7	343	2	D89605	protein F18G5.3 [i
47	29	70.7	1258	2	F96753	Similar to downy m
48	28	68.3	30	2	C61125	glucagon-like pept
49	28	68.3	30	2	B61125	glucagon-like pept
50	28	68.3	31	2	S44471	glucagon G1 - Nort
51	28	68.3	31	2	S44472	glucagon G2 - Nort
52	28	68.3	66	2	I51093	glucagon - chinook
53	28	68.3	122	1	GCAF2	glucagon 2 precurs
54	28	68.3	157	2	T17883	major capsid prote
55	28	68.3	451	2	H89798	conserved hypothet
56	28	68.3	1224	2	T07446	DNA-directed RNA p
57	28	68.3	1386	1	RNLVC2	DNA-directed RNA p
58	27	65.9	17	2	A60317	glucagon-like pept
59	27	65.9	38	1	GCFIK	glucagon-like pept
60	27	65.9	123	2	S29304	hypothetical prote
61	27	65.9	158	2	E70068	transcription regu
62	27	65.9	221	2	T26921	hypothetical prote
63	27	65.9	246	1	S01789	formate acetyltran
64	27	65.9	246	2	G85615	pyruvate formate 1
65	27	65.9	246	2	A99752	pyruvate formate 1
66	27	65.9	265	2	AH0612	pyruvate formate-1
67	27	65.9	642	2	S11386	sucrose alpha-gluc
68	27	65.9	1326	2	B56395	secretory phosphol

69	27	65.9	1458	1	A49707	phospholipase A2 r
70	27	65.9	1465	2	A56395	secretory phosphol
71	27	65.9	1827	1	A23945	sucrose alpha-gluc
72	27	65.9	1841	2	T10799	sucrose alpha-gluc
73	26	63.4	27	1	S07443	secretin - human
74	26	63.4	27	1	SEBO	secretin - bovine
75	26	63.4	27	1	SESH	secretin - sheep
76	26	63.4	27	2	A27267	secretin - dog
77	26	63.4	29	1	GCEN	glucagon - elephan
78	26	63.4	131	1	SEPG	secretin precursor
79	26	63.4	134	2	A40959	secretin precursor
80	26	63.4	209	2	A72366	hypothetical prote
81	26	63.4	261	2	A70916	probable tpi prote
82	26	63.4	265	2	H82048	triosephosphate is
83	26	63.4	370	2	T21374	hypothetical prote
84	26	63.4	663	1	XJECTK	transketolase (EC
85	26	63.4	663	2	AD0876	transketolase [imp
86	26	63.4	663	2	E85950	transketolase 1 is
87	26	63.4	663	2	B91105	transketolase 1 is
88	26	63.4	664	2	AG0113	transketolase (EC
89	26	63.4	689	2	T52060	protein MEDEA [imp
90	26	63.4	753	2	A96747	probable RNA-bind
91	26	63.4	1463	2	A53210	phospholipase A2 r
92	26	63.4	3871	2	T22812	hypothetical prote
93	25	61.0	27	1	SECH	secretin - chicken
94	25	61.0	29	1	GCFLE	glucagon - Europea
95	25	61.0	29	2	A61135	glucagon - bigeye
96	25	61.0	36	1	GCFI	glucagon-36 - spot
97	25	61.0	60	1	GCONC	glucagon precursor
98	25	61.0	65	2	S17441	hypothetical prote
99	25	61.0	121	2	S18751	chitinase (EC 3.2.
100	25	61.0	133	2	JC2202	secretin precursor

ALIGNMENTS

RESULT 1

GCPG

glucagon precursor - pig (fragment)

N;Alternate names: glicentin; oxyntomodulin

N;Contains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin); glucagon

C;Species: Sus scrofa domestica (domestic pig)

C;Date: 17-Dec-1982 #sequence_revision 31-Mar-1993 #text_change 20-Mar-1998

C;Accession: A01540; A60312; A91781; B32614; A28064

R;Thim, L.; Moody, A.J.

Regul. Pept. 2, 139-150, 1981

A;Title: The primary structure of porcine glicentin (proglucagon).

A;Reference number: A94233; MUID:81248172; PMID:6894800

A;Accession: A01540

A;Molecule type: protein

A;Residues: 1-69 <TH1>

A;Cross-references: UNIPARC:UPI0000173500

R;Thim, L.; Moody, A.J.

Regul. Pept. Suppl. 2, S33, 1983

A;Title: Primary structure of a possible porcine proglucagon fragment.

A;Reference number: A60312

A;Accession: A60312

A;Molecule type: protein

A;Residues: 1-30 <TH2>

A;Cross-references: UNIPARC:UPI000002C9AC

A;Note: this peptide is co-secreted with glucagon from the pancreas
 R;Bromer, W.W.; Sinn, L.G.; Behrens, O.K.
 J. Am. Chem. Soc. 79, 2807-2810, 1957
 A;Title: The amino acid sequence of glucagon. V. Location of amide groups, acid degrad
 A;Reference number: A91781
 A;Accession: A91781
 A;Molecule type: protein
 A;Residues: 33-61 <BRO>
 A;Cross-references: UNIPARC:UPI000002C586
 R;Orskov, C.; Bersani, M.; Johnsen, A.H.; Hojrup, P.; Holst, J.J.
 J. Biol. Chem. 264, 12826-12829, 1989
 A;Title: Complete sequences of glucagon-like peptide-1 from human and pig small intest
 A;Reference number: A92732; MUID:89327238; PMID:2753890
 A;Accession: B32614
 A;Molecule type: protein
 A;Residues: 78-107 <ORS>
 A;Cross-references: UNIPARC:UPI0000032E2A
 R;Buhl, T.; Thim, L.; Kofod, H.; Orskov, C.; Harling, H.; Holst, J.J.
 J. Biol. Chem. 263, 8621-8624, 1988
 A;Title: Naturally occurring products of proglucagon 111-160 in the porcine and human
 A;Reference number: A28064; MUID:88243712; PMID:3379036
 A;Accession: A28064
 A;Molecule type: protein
 A;Residues: 111-158 <BUH>
 A;Cross-references: UNIPARC:UPI0000173501
 C;Comment: X's represent missing amino acids, mostly basic, that are predicted to exist
 C;Superfamily: glucagon
 C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; inte
 F;1-69/Product: glucagon-69 #status experimental <G69>
 F;1-30/Region: glicentin-related peptide #status experimental
 F;33-69/Product: glucagon-37 #status predicted <G37>
 F;33-61/Product: glucagon #status experimental <GCN>
 F;78-107/Product: glucagon-like peptide 1 #status experimental <GL1>
 F;126-158/Product: glucagon-like peptide 2 #status experimental <GL2>
 F;107/Modified site: amidated carboxyl end (Arg) (amide in mature form from following

Query Match 78.0%; Score 32; DB 1; Length 158;
 Best Local Similarity 30.4%; Pred. No. 0.89;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | |
 Db 78 HAEGTFTSDVSSYLEGQAAKEFI 100

RESULT 2

GCBO

glucagon precursor - bovine

N;Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like

C;Species: Bos primigenius taurus (cattle)

C;Date: 14-Nov-1983 #sequence_revision 14-Nov-1983 #text_change 20-Mar-1998

C;Accession: A93970; A92081; A01538

R;Lopez, L.C.; Frazier, M.L.; Su, C.J.; Kumar, A.; Saunders, G.F.

Proc. Natl. Acad. Sci. U.S.A. 80, 5485-5489, 1983

A;Title: Mammalian pancreatic preproglucagon contains three glucagon-related peptides.

A;Reference number: A93970; MUID:83299996; PMID:6577439

A;Accession: A93970

A;Molecule type: mRNA

A;Residues: 1-180 <LOP>

A;Cross-references: UNIPARC:UPI00001734FF; EMBL:K00107

R;Bromer, W.W.; Boucher, M.E.; Koffenberger Jr., J.E.

J. Biol. Chem. 246, 2822-2827, 1971

A;Title: Amino acid sequence of bovine glucagon.

A;Reference number: A92081; MUID:71166445; PMID:5102927

A;Accession: A92081

A;Molecule type: protein

A;Residues: 53-81 <BRO>

A;Cross-references: UNIPARC:UPI000002C586

C;Superfamily: glucagon

C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc

F;1-20/Domain: signal sequence #status predicted <SIG>

F;21-180/Product: proglucagon #status predicted <PGC>

F;21-50/Region: glicentin-related peptide #status predicted

F;53-81/Product: glucagon #status experimental <GCN>

F;98-127/Product: glucagon-like peptide 1 #status experimental <GL1>

F;146-178/Product: glucagon-like peptide 2 #status predicted <GL2>

F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following

Query Match 78.0%; Score 32; DB 1; Length 180;

Best Local Similarity 30.4%; Pred. No. 1;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

```
Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
          | | || |
Db      98 HAEGTFTSDVSSYLEGQAAKEFI 120
```

RESULT 3

GCHY

glucagon precursor - golden hamster

N;Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like

C;Species: Mesocricetus auratus (golden hamster)

C;Date: 13-Jun-1983 #sequence_revision 13-Jun-1983 #text_change 20-Mar-1998

C;Accession: A01539

R;Bell, G.I.; Santerre, R.F.; Mullenbach, G.T.

Nature 302, 716-718, 1983

A;Title: Hamster preproglucagon contains the sequence of glucagon and two related pept

A;Reference number: A01539; MUID:83167563; PMID:6835407

A;Accession: A01539

A;Molecule type: mRNA

A;Residues: 1-180 <BEL>

A;Cross-references: UNIPARC:UPI00001734FE; EMBL:J00059

C;Superfamily: glucagon

C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc

F;1-20/Domain: signal sequence #status predicted <SIG>

F;21-180/Product: proglucagon #status predicted <PGC>

F;21-50/Region: glicentin-related peptide #status predicted

F;53-81/Product: glucagon #status predicted <GCN>

F;98-127/Product: glucagon-like peptide 1 #status predicted <GL1>

F;146-180/Product: glucagon-like peptide 2 #status predicted <GL2>

F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following

Query Match 78.0%; Score 32; DB 1; Length 180;

Best Local Similarity 30.4%; Pred. No. 1;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

```
Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
          | | || |
Db      98 HAEGTFTSDVSSYLEGQAAKEFI 120
```

RESULT 4

GCGP

glucagon precursor - guinea pig
 N;Alternate names: oxyntomodulin
 N;Contains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin); glucagon
 C;Species: Cavia porcellus (guinea pig)
 C;Date: 30-Sep-1987 #sequence_revision 31-Dec-1992 #text_change 09-Jul-2004
 C;Accession: A24856; A23849; A60323
 R;Seino, S.; Welsh, M.; Bell, G.I.; Chan, S.J.; Steiner, D.F.
 FEBS Lett. 203, 25-30, 1986
 A;Title: Mutations in the guinea pig preproglucagon gene are restricted to a specific
 A;Reference number: A24856; MUID:86248118; PMID:3755107
 A;Accession: A24856
 A;Molecule type: mRNA
 A;Residues: 1-180 <SEI>
 A;Cross-references: UNIPROT:P05110; UNIPARC:UPI000012B82C; DDBJ:D00014; GB:N00014; NID
 R;Huang, C.G.; Eng, J.; Pan, Y.C.E.; Hulmes, J.D.; Yalow, R.S.
 Diabetes 35, 508-512, 1986
 A;Title: Guinea pig glucagon differs from other mammalian glucagons.
 A;Reference number: A23849; MUID:86165412; PMID:3956884
 A;Accession: A23849
 A;Molecule type: protein
 A;Residues: 53-81 <HUA>
 A;Cross-references: UNIPARC:UPI00001734FD
 R;Conlon, J.M.; Hansen, H.F.; Schwartz, T.W.
 Regul. Pept. 11, 309-320, 1985
 A;Title: Primary structure of glucagon and a partial sequence of oxyntomodulin (glucag
 A;Reference number: A60323; MUID:86017849; PMID:4048553
 A;Accession: A60323
 A;Molecule type: protein
 A;Residues: 53-81 <CON>
 A;Cross-references: UNIPARC:UPI00001734FD
 A;Note: glucagon-37 was not completely sequenced
 C;Superfamily: glucagon
 C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc
 F;1-20/Domain: signal sequence #status predicted <SIG>
 F;21-180/Product: proglucagon #status predicted <PGC>
 F;21-50/Region: glicentin-related peptide #status predicted
 F;53-89/Product: glucagon-37 (oxyntomodulin) #status experimental <G37>
 F;53-81/Product: glucagon #status experimental <GCN>
 F;98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
 F;146-178/Product: glucagon-like peptide 2 #status predicted <GL2>
 F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following

Query Match 78.0%; Score 32; DB 1; Length 180;
 Best Local Similarity 30.4%; Pred. No. 1;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
 | | || | |
 Db 98 HAEGTFTSDVSSYLEGQAAKEFI 120

RESULT 5

GCHU

glucagon precursor [validated] - human
 N;Contains: glicentin; glicentin-related polypeptide (GRPP); glucagon; glucagon-like p
 C;Species: Homo sapiens (man)
 C;Date: 24-Apr-1984 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004
 C;Accession: A24377; A44197; A30875; A32614; A01541; S23309
 R;White, J.W.; Saunders, G.F.
 Nucleic Acids Res. 14, 4719-4730, 1986

A;Title: Structure of the human glucagon gene.
 A;Reference number: A24377; MUID:86259053; PMID:3725587
 A;Accession: A24377
 A;Molecule type: DNA
 A;Residues: 1-180 <WHI>
 A;Cross-references: UNIPROT:P01275; UNIPARC:UPI000012B832; GB:X03991
 R;Bell, G.I.; Sanchez-Pescador, R.; Laybourn, P.J.; Najarian, R.C.
 Nature 304, 368-371, 1983
 A;Title: Exon duplication and divergence in the human preproglucagon gene.
 A;Reference number: A44197; MUID:83271477; PMID:6877358
 A;Accession: A44197
 A;Molecule type: DNA
 A;Residues: 1-179 <BEL>
 A;Cross-references: UNIPARC:UPI000016A9A7; GB:V01515; NID:g31777; PIDN:CAA24759.1; PID
 R;Drucker, D.J.; Asa, S.
 J. Biol. Chem. 263, 13475-13478, 1988
 A;Title: Glucagon gene expression in vertebrate brain.
 A;Reference number: A30875; MUID:88330860; PMID:2901414
 A;Accession: A30875
 A;Molecule type: mRNA
 A;Residues: 1-180 <DRU>
 A;Cross-references: UNIPARC:UPI000012B832; GB:J04040; NID:g183269; PIDN:AAA52567.1; PI
 R;Orskov, C.; Bersani, M.; Johnsen, A.H.; Hojrup, P.; Holst, J.J.
 J. Biol. Chem. 264, 12826-12829, 1989
 A;Title: Complete sequences of glucagon-like peptide-1 from human and pig small intestine
 A;Reference number: A92732; MUID:89327238; PMID:2753890
 A;Accession: A32614
 A;Molecule type: protein
 A;Residues: 98-127 <ORS>
 A;Cross-references: UNIPARC:UPI0000032E2A
 R;Thomsen, J.; Kristiansen, K.; Brunfeldt, K.; Sundby, F.
 FEBS Lett. 21, 315-319, 1972
 A;Title: The amino acid sequence of human glucagon.
 A;Reference number: A91373
 A;Accession: A01541
 A;Molecule type: protein
 A;Residues: 53-81 <THO>
 A;Cross-references: UNIPARC:UPI000002C586
 R;Tsugita, A.; Takamoto, K.; Kamo, M.; Iwadate, H.
 Eur. J. Biochem. 206, 691-696, 1992
 A;Title: C-terminal sequencing of protein. A novel partial acid hydrolysis and analysis
 A;Reference number: S23188; MUID:92298996; PMID:1606956
 A;Accession: S23309
 A;Molecule type: protein
 A;Residues: 53-81 <TSU>
 A;Cross-references: UNIPARC:UPI000002C586
 C;Comment: In pancreatic alpha-cells, proglucagon is processed to glicentin-related po
 C;Genetics:
 A;Gene: GDB:GCG
 A;Cross-references: GDB:119265; OMIM:138030
 A;Map position: 2q36-2q37
 A;Introns: 31/2; 85/2; 131/2; 179/2
 C;Superfamily: glucagon
 C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; inte
 F;1-20/Domain: signal sequence #status predicted <SIG>
 F;21-180/Product: proglucagon #status experimental <PGC>
 F;21-89/Product: glicentin #status experimental <GLN>
 F;21-50/Product: glicentin-related polypeptide #status predicted <GRPP>
 F;53-89/Product: oxyntomodulin #status experimental <OXN>
 F;53-81/Product: glucagon #status experimental <GCN>
 F;92-178/Product: major proglucagon fragment #status experimental <MPGF>

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | | | |
Db 98 HAEGTFTSDVSSYLEGOAAKEFI 120

GCRT
glucagon precursor - rat
N;Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like peptide 2
C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 09-Jul-2004
C;Accession: A22655; A25190; A44198
R;Heinrich, G.; Gros, P.; Habener, J.F.
J. Biol. Chem. 259, 14082-14087, 1984
A;Title: Glucagon gene sequence: four of six exons encode separate functional domains
A;Reference number: A22655; MUID:85054853; PMID:6094539
A;Accession: A22655
A;Molecule type: DNA
A;Residues: 1-180 <HEI>
A;Cross-references: UNIPROT:P06883; UNIPARC:UPI000002DB13; EMBL:K02809
A;Note: the authors translated the codon TTG for residue 10 as Glu and ACC for residue 11 as Thr
R;Mojsov, S.; Heinrich, G.; Wilson, I.B.; Ravazzola, M.; Orci, L.; Habener, J.F.
J. Biol. Chem. 261, 11880-11889, 1986
A;Title: Preproglucagon gene expression in pancreas and intestine diversifies at the 1.5 kb level
A;Reference number: A25190; MUID:86304324; PMID:3528148
A;Accession: A25190
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-180 <MOJ>
A;Cross-references: UNIPARC:UPI000002DB13
R;Heinrich, G.; Gros, P.; Lund, P.K.; Bentley, R.C.; Habener, J.F.
Endocrinology 115, 2176-2181, 1984
A;Title: Pre-proglucagon messenger ribonucleic acid: nucleotide and encoded amino acid sequence
A;Reference number: A44198; MUID:85051023; PMID:6548696
A;Accession: A44198
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-180 <HE2>
A;Cross-references: UNIPARC:UPI000002DB13; GB:K02809; GB:K02810; GB:K02811; GB:K02812
C;Genetics:
A;Introns: 31/2; 85/2; 131/2; 179/2
C;Superfamily: glucagon
C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; pancreas
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-180/Product: proglucagon #status predicted <PGC>
F;21-50/Region: glicentin-related peptide #status predicted
F;53-81/Product: glucagon #status predicted <GCN>
F;98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
F;146-180/Product: glucagon-like peptide 2 #status predicted <GL2>
F;127/Modifiedsite: amidated carboxyl end (Arg) (amide in mature form from following

<http://es.ScoreAccessWeb/GetItem.action?AppId=09757788&seqId=1063604&ItemName=2...> 1/25/07

Best Local Similarity 30.4%; Pred. No. 1;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | | | |
Db 98 HAEGTFTSDVSSYLEGQAAKEFI 120

RESULT 7

GCRTDU

glucagon precursor - degu

N;Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like

C;Species: Octodon degus (degu)

C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004

C;Accession: C36118

R;Nishi, M.; Steiner, D.F.

Mol. Endocrinol. 4, 1192-1198, 1990

A;Title: Cloning of complementary DNAs encoding islet amyloid polypeptide, insulin, and

A;Reference number: A36118; MUID:91155952; PMID:2293024

A;Accession: C36118

A;Molecule type: mRNA

A;Residues: 1-180 <NIS>

A;Cross-references: UNIPROT:P22890; UNIPARC:UPI000012B839; GB:M57688; NID:g202467; PID

C;Superfamily: glucagon

C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc

F;1-20/Domain: signal sequence #status predicted <SIG>

F;21-180/Product: proglucagon #status predicted <PGC>

F;21-50/Region: glicentin-related peptide #status predicted

F;53-81/Product: glucagon #status predicted <GCN>

F;98-127/Product: glucagon-like peptide 1 #status predicted <GL1>

F;146-178/Product: glucagon-like peptide 2 #status predicted <GL2>

F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following

Query Match 78.0%; Score 32; DB 1; Length 180;
Best Local Similarity 30.4%; Pred. No. 1;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | | | |
Db 98 HAEGTFTSDVSSYLEGQAAKEFI 120

RESULT 8

A57294

glucagon precursor - mouse

C;Species: Mus musculus (house mouse)

C;Date: 01-Dec-1995 #sequence_revision 01-Dec-1995 #text_change 09-Jul-2004

C;Accession: A57294; S49903

R;Rothenberg, M.E.; Eilertson, C.D.; Klein, K.; Zhou, Y.; Lindberg, I.; McDonald, J.K.
J. Biol. Chem. 270, 10136-10146, 1995

A;Title: Processing of mouse proglucagon by recombinant prohormone convertase 1 and im

A;Reference number: A57294; MUID:95247722; PMID:7730317

A;Accession: A57294

A;Status: preliminary

A;Molecule type: mRNA

A;Residues: 1-180 <ROT>

A;Cross-references: UNIPROT:P55095; UNIPARC:UPI000000192D; EMBL:Z46845; NID:g599880; P

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 78.0%; Score 32; DB 2; Length 180;

Best Local Similarity 30.4%; Pred. No. 1;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 98 HAEGTFTSDVSSYLEGQAAKEFI 120

RESULT 9

GCFGB

glucagon precursor - bullfrog (fragments)

N;Alternate names: oxyntomodulin

N;Contains: glucagon; glucagon-36 (oxyntomodulin); glucagon-like peptide 1; glucagon-1

C;Species: Rana catesbeiana (bullfrog)

C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 20-Mar-1998

C;Accession: B28091; C28091; D28091

R;Pollock, H.G.; Hamilton, J.W.; Rouse, J.B.; Ebner, K.E.; Rawitch, A.B.

J. Biol. Chem. 263, 9746-9751, 1988

A;Title: Isolation of peptide hormones from the pancreas of the bullfrog (Rana catesbe)

A;Reference number: A92730; MUID:88257102; PMID:3260236

A;Accession: B28091

A;Molecule type: protein

A;Residues: 1-36 <PO2>

A;Cross-references: UNIPARC:UPI0000173502

A;Accession: C28091

A;Molecule type: protein

A;Residues: 37-68 <POL>

A;Cross-references: UNIPARC:UPI0000173502

A;Accession: D28091

A;Molecule type: protein

A;Residues: 69-101 <PO3>

A;Cross-references: UNIPARC:UPI0000173502

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

F;1-36/Product: glucagon-36 (oxyntomodulin) #status experimental <G36>

F;1-29/Product: glucagon #status predicted <GCN>

F;37-67/Product: glucagon-like peptide 1 #status experimental <GL1>

F;69-101/Product: glucagon-like peptide 2 #status experimental <GL2>

Query Match 75.6%; Score 31; DB 1; Length 101;

Best Local Similarity 26.1%; Pred. No. 1;

Matches 6; Conservative 1; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | |:
Db 37 HADGTFTSDMSSYLEEKAAKEFV 59

RESULT 10

A61583

glucagon - ostrich

C;Species: Struthio camelus (ostrich)

C;Date: 28-Oct-1994 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004

C;Accession: A61583

R;Ferreira, A.; Litthauer, D.; Saayman, H.; Oelofsen, W.; Crabb, J.; Lazure, C.

Int. J. Pept. Protein Res. 38, 90-95, 1991

A;Title: Purification and primary structure of glucagon from ostrich pancreas splenic

A;Reference number: A61583; MUID:92040567; PMID:1938110

A;Accession: A61583

A;Molecule type: protein

A;Residues: 1-29 <FER>

A;Cross-references: UNIPROT:P01276; UNIPARC:UPI000012B827
C;Superfamily: glucagon
C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 1; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9
| | || |
Db 1 HSQGTFTSD 9

RESULT 11

GCCB

glucagon - Chinchilla brevicaudata

C;Species: Chinchilla brevicaudata, Chinchilla lanigera brevicaudata

C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004

C;Accession: A60413

R;Eng, J.; Kleinman, W.A.; Chu, L.S.

Peptides 11, 683-685, 1990

A;Title: Purification of peptide hormones from chinchilla pancreas by chemical assay.

A;Reference number: A60413; MUID:91045327; PMID:2235678

A;Accession: A60413

A;Molecule type: protein

A;Residues: 1-29 <ENG>

A;Cross-references: UNIPROT:P31297; UNIPARC:UPI000012B82D

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 1; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9
| | || |
Db 1 HSQGTFTSD 9

RESULT 12

GCDF

glucagon - smaller spotted catshark

C;Species: Scyliorhinus canicula (smaller spotted catshark, smaller spotted dogfish)

C;Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 09-Jul-2004

C;Accession: A26992

R;Conlon, J.M.; O'Toole, L.; Thim, L.

FEBS Lett. 214, 50-56, 1987

A;Title: Primary structure of glucagon from the gut of the common dogfish (Scyliorhinu

A;Reference number: A26992; MUID:87190953; PMID:3569517

A;Accession: A26992

A;Molecule type: protein

A;Residues: 1-29 <CON>

A;Cross-references: UNIPROT:P09687; UNIPARC:UPI000017350C

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; intestine; pancreas

Query Match 73.2%; Score 30; DB 1; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9

Db | | || |
1 HSEGTFTSD 9

RESULT 13

GCDK

glucagon - duck

C;Species: *Anas platyrhynchos* (domestic duck)

C;Date: 13-Jul-1981 #sequence_revision 13-Jul-1981 #text_change 09-Jul-2004

C;Accession: A01542

R;Sundby, F.; Frandsen, E.K.; Thomsen, J.; Kristiansen, K.; Brunfeldt, K.

FEBS Lett. 26, 289-293, 1972

A;Title: Crystallization and amino acid sequence of duck glucagon.

A;Reference number: A91384; MUID:73049475; PMID:4636745

A;Accession: A01542

A;Molecule type: protein

A;Residues: 1-29 <SUN>

A;Cross-references: UNIPROT:P01276; UNIPARC:UPI000012B827

A;Experimental source: Pekin breed

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 1; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9

 | | || |
Db 1 HSQGTFTSD 9

RESULT 14

GCOPV

glucagon - North American opossum

C;Species: *Didelphis virginiana*, *Didelphis marsupialis virginiana* (North American opos

C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004

C;Accession: JQ0364

R;Yu, J.H.; Eng, J.; Rattan, S.; Yalow, R.S.

Peptides 10, 1195-1197, 1989

A;Title: Opossum insulin, glucagon and pancreatic polypeptide: amino acid sequences.

A;Reference number: JQ0362; MUID:90160042; PMID:2695899

A;Accession: JQ0364

A;Molecule type: protein

A;Residues: 1-29 <YUJ>

A;Cross-references: UNIPROT:P18108; UNIPARC:UPI000012B830

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 1; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9

 | | || |
Db 1 HSQGTFTSD 9

RESULT 15

GCTTS

glucagon - slider turtle

C;Species: *Pseudemys scripta* (slider)

C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004
C;Accession: B60414
R;Conlon, J.M.; Hicks, J.W.
Peptides 11, 461-466, 1990
A;Title: Isolation and structural characterization of insulin, glucagon and somatostat
A;Reference number: A60414; MUID:90341082; PMID:1974347
A;Accession: B60414
A;Molecule type: protein
A;Residues: 1-29 <CON>
A;Cross-references: UNIPROT:P01276; UNIPARC:UPI000012B827
C;Superfamily: glucagon
C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 1; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9
| | | |
Db 1 HSQGTFTSD 9

RESULT 16

A91740

glucagon - turkey (tentative sequence)

C;Species: Meleagris gallopavo (common turkey)

C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 20-Mar-1998

C;Accession: A91740; A01542

R;Markussen, J.; Frandsen, E.; Heding, L.G.; Sundby, F.

Horm. Metab. Res. 4, 360-363, 1972

A;Title: Turkey glucagon: crystallization, amino acid composition and immunology.

A;Reference number: A91740; MUID:73074118; PMID:4645932

A;Accession: A91740

A;Molecule type: protein

A;Residues: 1-29 <MAR>

A;Cross-references: UNIPARC:UPI000012B830

A;Note: the composition was determined

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 2; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9
| | | |
Db 1 HSQGTFTSD 9

RESULT 17

S07211

glucagon - marbled electric ray (tentative sequence)

C;Species: Torpedo marmorata (marbled electric ray)

C;Date: 12-Feb-1993 #sequence_revision 12-Feb-1993 #text_change 09-Jul-2004

C;Accession: S07211

R;Conlon, J.M.; Thim, L.

Gen. Comp. Endocrinol. 60, 398-405, 1985

A;Title: Primary structure of glucagon from an elasmobranchian fish Torpedo marmorata.

A;Reference number: S07211; MUID:86083105; PMID:4076759

A;Accession: S07211

A;Molecule type: protein

A;Residues: 1-29 <CON>

A;Cross-references: UNIPROT:P09567; UNIPARC:UPI000012B841

A;Note: the sequence from table 2 is inconsistent with that from Fig. 4 in lacking 8-S

C;Superfamily: glucagon

C;Keywords: duplication; hormone

Query Match 73.2%; Score 30; DB 2; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9

| | | |

Db 1 HSEGTFTSD 9

RESULT 18

C39258

glucagon - common squirrel monkey

C;Species: Saimiri sciureus (common squirrel monkey)

C;Date: 03-May-1994 #sequence_revision 03-May-1994 #text_change 09-Jul-2004

C;Accession: C39258

R;Yu, J.H.; Eng, J.; Yalow, R.S.

Proc. Natl. Acad. Sci. U.S.A. 87, 9766-9768, 1990

A;Title: Isolation and amino acid sequences of squirrel monkey (Saimiri sciurea) insul

A;Reference number: A39258; MUID:91088593; PMID:2263627

A;Accession: C39258

A;Molecule type: protein

A;Residues: 1-29 <YUA>

A;Cross-references: UNIPROT:P25449; UNIPARC:UPI000002C586

A;Note: the amino acid sequence is described but not shown

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 2; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9

| | | |

Db 1 HSQGTFTSD 9

RESULT 19

A91742

glucagon - Arabian camel (tentative sequence)

C;Species: Camelus dromedarius (Arabian camel)

C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 09-Jul-2004

C;Accession: A91742; A01541

R;Sundby, F.; Markussen, J.; Danho, W.

Horm. Metab. Res. 6, 425, 1974

A;Title: Camel glucagon: isolation, crystallization and amino acid composition.

A;Reference number: A91742; MUID:75027473; PMID:4421675

A;Accession: A91742

A;Molecule type: protein

A;Residues: 1-29 <SUN>

A;Cross-references: UNIPROT:P25449; UNIPARC:UPI000002C586

A;Note: the composition was determined

A;Note: electrophoresis indicated the presence of two minor glucagon components

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 2; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9
| | || |
Db 1 HSQGTFTSD 9

RESULT 20

A91741

glucagon - rabbit (tentative sequence)

C;Species: Oryctolagus cuniculus (domestic rabbit)

C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 09-Jul-2004

C;Accession: A91741; A01541

R;Sundby, F.; Markussen, J.

Horm. Metab. Res. 4, 56, 1972

A;Title: Rabbit glucagon: isolation, crystallization and amino acid composition.

A;Reference number: A91741; MUID:72129389; PMID:5011077

A;Accession: A91741

A;Molecule type: protein

A;Residues: 1-29 <SUN>

A;Cross-references: UNIPROT:P25449; UNIPARC:UPI000002C586

A;Note: the composition was determined

A;Note: electrophoresis indicated the presence of two minor glucagon components

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

Query Match 73.2%; Score 30; DB 2; Length 29;
Best Local Similarity 55.6%; Pred. No. 0.53;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9
| | || |
Db 1 HSQGTFTSD 9

RESULT 21

S44473

glucagon-like peptide - North American paddlefish (Polyodon spathula)

C;Species: Polyodon spathula

C;Date: 18-Sep-1997 #sequence_revision 18-Sep-1997 #text_change 09-Jul-2004

C;Accession: S44473

R;Nguyen, T.M.; Mommensen, T.P.; Mims, S.M.; Conlon, J.M.

Biochem. J. 300, 339-345, 1994

A;Title: Characterization of insulins and proglucagon-derived peptides from a phylogen

A;Reference number: S44467; MUID:94271144; PMID:8002937

A;Accession: S44473

A;Molecule type: protein

A;Residues: 1-30 <NGU>

A;Cross-references: UNIPROT:Q7LZN3; UNIPARC:UPI0000176623

C;Superfamily: glucagon

C;Keywords: duplication; hormone; pancreas

F;1-30/Product: glucagon-like peptide #status predicted <MAT>

Query Match 73.2%; Score 30; DB 2; Length 30;
Best Local Similarity 26.1%; Pred. No. 0.55;
Matches 6; Conservative 1; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTDXXXXXXXXXXXXFI 23
| | : | | ||

Db 1 HADGTYTSDASSFLQEQAARDFI 23

RESULT 22

HWGH3Z

exendin-3 - Mexican beaded lizard

C;Species: Heloderma horridum (Mexican beaded lizard)

C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004

C;Accession: A23674

R;Eng, J.; Andrews, P.C.; Kleinman, W.A.; Singh, L.; Raufman, J.P.

J. Biol. Chem. 265, 20259-20262, 1990

A;Title: Purification and structure of exendin-3, a new pancreatic secretagogue isolat

A;Reference number: A23674; MUID:91056067; PMID:1700785

A;Accession: A23674

A;Molecule type: protein

A;Residues: 1-39 <ENG>

A;Cross-references: UNIPROT:P20394; UNIPARC:UPI0000032DE6

C;Comment: Exendins are venom components that are thought to bind to receptors for vas

C;Superfamily: glucagon

C;Keywords: amidated carboxyl end; duplication; secretagogue; venom

F;39/Modified site: amidated carboxyl end (Ser) #status experimental

Query Match 73.2%; Score 30; DB 1; Length 39;
Best Local Similarity 55.6%; Pred. No. 0.71;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9

| | || |

Db 1 HSDGTFTSD 9

RESULT 23

GCDG69

glucagon-69 - dog

N;Alternate names: glicentin

N;Contains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin)

C;Species: Canis lupus familiaris (dog)

C;Date: 31-Dec-1992 #sequence_revision 31-Dec-1992 #text_change 09-Jul-2004

C;Accession: A60318

R;Shinomura, Y.; Eng, J.; Yalow, R.S.

Regul. Pept. 23, 299-308, 1988

A;Title: Immunoreactive glucagons purified from dog pancreas, stomach and ileum.

A;Reference number: A60318; MUID:89185675; PMID:3238052

A;Accession: A60318

A;Molecule type: protein

A;Residues: 1-69 <SHI>

A;Cross-references: UNIPROT:P29794; UNIPARC:UPI000012B82A

A;Experimental source: ileum

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; intestine; pancreas

F;1-69/Product: glucagon-69 (glicentin) #status experimental <G69>

F;1-30/Region: glicentin-related peptide #status predicted

F;33-69/Product: glucagon-37 (oxyntomodulin) #status predicted <G37>

F;33-61/Product: glucagon #status predicted <GCN>

Query Match 73.2%; Score 30; DB 1; Length 69;
Best Local Similarity 55.6%; Pred. No. 1.3;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9

| | || |

Db 33 HSQGTFTSD 41

RESULT 24

GCFIS

glucagon precursor - shorthorn sculpin (fragments)

N;Contains: glucagon; glucagon-like peptide 1

C;Species: Myoxocephalus scorpius (shorthorn sculpin, daddy sculpin)

C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 09-Jul-2004

C;Accession: A27188

R;Conlon, J.M.; Falkmer, S.; Thim, L.

Eur. J. Biochem. 164, 117-122, 1987

A;Title: Primary structures of three fragments of proglucagon from the pancreatic isle

A;Reference number: A27188; MUID:87161872; PMID:3549298

A;Accession: A27188

A;Molecule type: protein

A;Residues: 1-27;28-56;57-87 <CON>

A;Cross-references: UNIPROT:P09686; UNIPARC:UPI000012B83E; UNIPARC:UPI0000173506; UNIP

C;Superfamily: glucagon

C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas

F;28-56/Product: glucagon #status experimental <GCN>

F;57-87/Product: glucagon-like peptide 1 #status predicted <GL1>

Query Match 73.2%; Score 30; DB 1; Length 87;

Best Local Similarity 55.6%; Pred. No. 1.6;

Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HXXGXFTXD 9

| | | |

Db 57 HADGTFTSD 65

RESULT 25

GCAF

[start](#) | [next page](#)

SCORE Search Results Details for Application 09757788 and Search Result 20070122_145832_us-09-757-788a-1.rai.

Score Home	Retrieve Application	SCORE System	SCORE	Comments /
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OM protein - protein search, using sw model

Run on: January 23, 2007, 03:22:09 ; Search time 50 Seconds
(without alignments)
68.274 Million cell updates/sec

Title: US-09-757-788A-1
Perfect score: 41
Sequence: 1 HXXGXFTXDXXXXXXXXXXXXXFIXXXXXXXXXXXXXXXXXXX 39

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 650591 seqs, 87530628 residues

Total number of hits satisfying chosen parameters: 650591

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : Issued Patents_AA:*

- 1: /EMC_Celerra_SIDS3/ptodata/2/iaa/5_COMB.pep:*
- 2: /EMC_Celerra_SIDS3/ptodata/2/iaa/6_COMB.pep:*
- 3: /EMC_Celerra_SIDS3/ptodata/2/iaa/7_COMB.pep:*
- 4: /EMC_Celerra_SIDS3/ptodata/2/iaa/H_COMB.pep:*
- 5: /EMC_Celerra_SIDS3/ptodata/2/iaa/PCTUS_COMB.pep:*
- 6: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE_COMB.pep:*
- 7: /EMC_Celerra_SIDS3/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	%
Result	Query

No.	Score	Match Length	DB	ID	Description
1	33	80.5	30	2 US-09-268-578C-15	Sequence 15, Appl
2	33	80.5	31	2 US-09-209-799D-20	Sequence 20, Appl
3	33	80.5	31	2 US-09-997-792A-17	Sequence 17, Appl
4	33	80.5	31	2 US-09-268-578C-35	Sequence 35, Appl
5	32	78.0	27	2 US-08-472-349-7	Sequence 7, Appli
6	32	78.0	27	2 US-09-943-084-7	Sequence 7, Appli
7	32	78.0	28	1 US-08-095-162-4	Sequence 4, Appli
8	32	78.0	28	1 US-08-470-220A-4	Sequence 4, Appli
9	32	78.0	28	2 US-08-967-374-4	Sequence 4, Appli
10	32	78.0	28	2 US-08-915-918A-3	Sequence 3, Appli
11	32	78.0	28	2 US-08-472-349-5	Sequence 5, Appli
12	32	78.0	28	2 US-09-209-799D-8	Sequence 8, Appli
13	32	78.0	28	2 US-09-505-991-4	Sequence 4, Appli
14	32	78.0	28	2 US-09-212-663-5	Sequence 5, Appli
15	32	78.0	28	2 US-09-997-792A-6	Sequence 6, Appli
16	32	78.0	28	2 US-10-170-301-2	Sequence 2, Appli
17	32	78.0	28	2 US-09-943-084-5	Sequence 5, Appli
18	32	78.0	28	5 PCT-US95-15800-21	Sequence 21, Appl
19	32	78.0	29	1 US-08-095-162-18	Sequence 18, Appl
20	32	78.0	29	1 US-08-470-220A-18	Sequence 18, Appl
21	32	78.0	29	2 US-08-967-374-18	Sequence 18, Appl
22	32	78.0	29	2 US-08-961-405A-3	Sequence 3, Appli
23	32	78.0	29	2 US-08-472-349-4	Sequence 4, Appli
24	32	78.0	29	2 US-09-209-799D-3	Sequence 3, Appli
25	32	78.0	29	2 US-09-209-799D-9	Sequence 9, Appli
26	32	78.0	29	2 US-09-505-991-18	Sequence 18, Appl
27	32	78.0	29	2 US-09-997-792A-3	Sequence 3, Appli
28	32	78.0	29	2 US-09-997-792A-7	Sequence 7, Appli
29	32	78.0	29	2 US-09-585-186A-3	Sequence 3, Appli
30	32	78.0	29	2 US-09-383-789B-2	Sequence 2, Appli
31	32	78.0	29	2 US-09-834-229A-3	Sequence 3, Appli
32	32	78.0	29	2 US-09-943-084-4	Sequence 4, Appli
33	32	78.0	30	1 US-08-066-480-6	Sequence 6, Appli
34	32	78.0	30	1 US-08-095-162-1	Sequence 1, Appli
35	32	78.0	30	1 US-08-470-220A-1	Sequence 1, Appli
36	32	78.0	30	1 US-08-927-227-1	Sequence 1, Appli
37	32	78.0	30	2 US-08-967-374-1	Sequence 1, Appli
38	32	78.0	30	2 US-09-348-136-1	Sequence 1, Appli
39	32	78.0	30	2 US-08-961-405A-5	Sequence 5, Appli
40	32	78.0	30	2 US-08-961-405A-9	Sequence 9, Appli
41	32	78.0	30	2 US-08-915-918A-5	Sequence 5, Appli
42	32	78.0	30	2 US-09-302-596-4	Sequence 4, Appli
43	32	78.0	30	2 US-08-472-349-3	Sequence 3, Appli
44	32	78.0	30	2 US-09-333-415-4	Sequence 4, Appli
45	32	78.0	30	2 US-09-585-181A-4	Sequence 4, Appli
46	32	78.0	30	2 US-09-209-799D-10	Sequence 10, Appl
47	32	78.0	30	2 US-09-975-905-1	Sequence 1, Appli
48	32	78.0	30	2 US-09-505-991-1	Sequence 1, Appli
49	32	78.0	30	2 US-09-573-809-1	Sequence 1, Appli
50	32	78.0	30	2 US-09-303-016-4	Sequence 4, Appli
51	32	78.0	30	2 US-09-212-663-4	Sequence 4, Appli
52	32	78.0	30	2 US-09-614-847-114	Sequence 114, App
53	32	78.0	30	2 US-09-997-792A-8	Sequence 8, Appli
54	32	78.0	30	2 US-09-805-507-4	Sequence 4, Appli
55	32	78.0	30	2 US-09-585-186A-5	Sequence 5, Appli
56	32	78.0	30	2 US-09-585-186A-9	Sequence 9, Appli
57	32	78.0	30	2 US-09-268-578C-8	Sequence 8, Appli
58	32	78.0	30	2 US-09-268-578C-10	Sequence 10, Appl
59	32	78.0	30	2 US-09-268-578C-14	Sequence 14, Appl

60	32	78.0	30	2	US-09-268-578C-16	Sequence 16, Appl
61	32	78.0	30	2	US-09-268-578C-19	Sequence 19, Appl
62	32	78.0	30	2	US-09-268-578C-20	Sequence 20, Appl
63	32	78.0	30	2	US-09-268-578C-48	Sequence 48, Appl
64	32	78.0	30	2	US-09-268-578C-49	Sequence 49, Appl
65	32	78.0	30	2	US-09-268-578C-51	Sequence 51, Appl
66	32	78.0	30	2	US-09-268-578C-54	Sequence 54, Appl
67	32	78.0	30	2	US-09-268-578C-55	Sequence 55, Appl
68	32	78.0	30	2	US-09-268-578C-57	Sequence 57, Appl
69	32	78.0	30	2	US-09-268-578C-59	Sequence 59, Appl
70	32	78.0	30	2	US-09-830-323-1	Sequence 1, Appli
71	32	78.0	30	2	US-09-622-105-3	Sequence 3, Appli
72	32	78.0	30	2	US-10-125-255-1	Sequence 1, Appli
73	32	78.0	30	2	US-09-859-804-4	Sequence 4, Appli
74	32	78.0	30	2	US-09-656-121-11	Sequence 11, Appl
75	32	78.0	30	2	US-09-834-229A-5	Sequence 5, Appli
76	32	78.0	30	2	US-09-147-345A-97	Sequence 97, Appl
77	32	78.0	30	2	US-09-147-345A-107	Sequence 107, App
78	32	78.0	30	2	US-09-147-345A-110	Sequence 110, App
79	32	78.0	30	2	US-09-147-345A-111	Sequence 111, App
80	32	78.0	30	2	US-09-147-345A-115	Sequence 115, App
81	32	78.0	30	2	US-09-943-084-3	Sequence 3, Appli
82	32	78.0	30	2	US-09-635-679E-4	Sequence 4, Appli
83	32	78.0	30	2	US-09-623-548A-344	Sequence 344, App
84	32	78.0	30	2	US-09-623-548A-355	Sequence 355, App
85	32	78.0	30	2	US-08-908-867-3	Sequence 3, Appli
86	32	78.0	30	2	US-10-265-345A-2	Sequence 2, Appli
87	32	78.0	30	2	US-10-265-345A-9	Sequence 9, Appli
88	32	78.0	30	2	US-10-265-345A-10	Sequence 10, Appl
89	32	78.0	30	2	US-10-055-259-4	Sequence 4, Appli
90	32	78.0	30	2	US-09-657-276-344	Sequence 344, App
91	32	78.0	30	2	US-09-657-276-355	Sequence 355, App
92	32	78.0	30	2	US-09-982-978-4	Sequence 4, Appli
93	32	78.0	30	2	US-09-889-330-189	Sequence 189, App
94	32	78.0	30	2	US-09-857-636A-1	Sequence 1, Appli
95	32	78.0	30	2	US-09-857-636A-32	Sequence 32, Appl
96	32	78.0	30	2	US-09-857-636A-71	Sequence 71, Appl
97	32	78.0	30	2	US-09-857-636A-72	Sequence 72, Appl
98	32	78.0	30	2	US-09-857-636A-415	Sequence 415, App
99	32	78.0	30	2	US-09-671-773C-3	Sequence 3, Appli
100	32	78.0	30	2	US-09-851-738-4	Sequence 4, Appli

ALIGNMENTS

RESULT 1

US-09-268-578C-15

; Sequence 15, Application US/09268578C

; Patent No. 6620910

; GENERAL INFORMATION:

; APPLICANT: ADIR ET COMPAGNIE

; TITLE OF INVENTION: NEW PEPTIDE COMPOUNDS ANALOGUES OF

; TITLE OF INVENTION: GLUCAGON-LIKE-PEPTIDE-1(7-37)

; FILE REFERENCE: adir300

; CURRENT APPLICATION NUMBER: US/09/268,578C

; CURRENT FILING DATE: 1999-03-15

; NUMBER OF SEQ ID NOS: 59

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 15

; LENGTH: 30

; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: glucagon-like
; OTHER INFORMATION: peptides
US-09-268-578C-15

Query Match 80.5%; Score 33; DB 2; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.22;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HASGTFTSDVSSYLEGQAAKEFI 23

RESULT 2

US-09-209-799D-20
; Sequence 20, Application US/09209799D
; Patent No. 6380357
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
; APPLICANT: Narasimhan, Chakravarthy
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
; FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/209,799D
; CURRENT FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: synthetic construct
US-09-209-799D-20

Query Match 80.5%; Score 33; DB 2; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.22;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1.HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HATGTFTSDVSSYLEGQAAKEFI 23

RESULT 3

US-09-997-792A-17
; Sequence 17, Application US/09997792A
; Patent No. 6555521
; GENERAL INFORMATION:
; APPLICANT: ELI LILLY and COMPANY
; TITLE OF INVENTION: Glucagon-Like Peptide-1 Crystals
; FILE REFERENCE: X-10242A
; CURRENT APPLICATION NUMBER: US/09/997,792A
; CURRENT FILING DATE: 2002-09-30
; PRIOR APPLICATION NUMBER: US 60/069,728
; PRIOR FILING DATE: 1997-12-16
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 17
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-09-997-792A-17

Query Match 80.5%; Score 33; DB 2; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.22;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HATGTFTSDVSSYLEGQAAKEFI 23

RESULT 4

US-09-268-578C-35

; Sequence 35, Application US/09268578C
; Patent No. 6620910
; GENERAL INFORMATION:
; APPLICANT: ADIR ET COMPAGNIE
; TITLE OF INVENTION: NEW PEPTIDE COMPOUNDS ANALOGUES OF
; TITLE OF INVENTION: GLUCAGON-LIKE-PEPTIDE-1(7-37)
; FILE REFERENCE: adir300
; CURRENT APPLICATION NUMBER: US/09/268,578C
; CURRENT FILING DATE: 1999-03-15
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 35
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: glucagon-like
; OTHER INFORMATION: peptides
US-09-268-578C-35

Query Match 80.5%; Score 33; DB 2; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.22;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HASGTFTSDVSSYLEGQAAKEFI 23

RESULT 5

US-08-472-349-7

; Sequence 7, Application US/08472349
; Patent No. 6284727
; GENERAL INFORMATION:
; APPLICANT: Kim, Yesook
; APPLICANT: Lambert, William J.
; APPLICANT: Qi, Hong
; APPLICANT: Gelfand, Robert A.
; APPLICANT: Geoghegan, Kieran F.
; APPLICANT: Danley, Dennis E.
; TITLE OF INVENTION: Prolonged Delivery of Peptides
; NUMBER OF SEQUENCES: 7


```

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pfizer Inc
; STREET: 235 East 42nd Street, 20th Floor
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10017-5755
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,349
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/181,655
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sheyka, Robert F.
; REGISTRATION NUMBER: 31,304
; REFERENCE/DOCKET NUMBER: PC8391
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212)573-1189
; TELEFAX: (212)573-1939
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 27 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
; ORGANISM: N/A
; STRAIN: N/A
; INDIVIDUAL ISOLATE: N/A
; HAPLOTYPE: N/A
; CELL LINE: N/A
; IMMEDIATE SOURCE:
; LIBRARY: N/A
; CLONE: N/A
; POSITION IN GENOME:
; CHROMOSOME/SEGMENT: N/A
; MAP POSITION: N/A
US-08-472-349-7

```

```

Query Match          78.0%; Score 32; DB 2; Length 27;
Best Local Similarity 30.4%; Pred. No. 0.34;
Matches      7; Conservative    0; Mismatches 16; Indels    0; Gaps    0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
        | | || |                ||
Db      1 HAEGTFTSDVSSYLEGQAAKEFI 23

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RESULT 6

; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-943-084-7

Query Match 78.0%; Score 32; DB 2; Length 27;
Best Local Similarity 30.4%; Pred. No. 0.34;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 7

US-08-095-162-4

; Sequence 4, Application US/08095162

; Patent No. 5512459

; GENERAL INFORMATION:

; APPLICANT: Wagner, Fred W.

; APPLICANT: Stout, Jay

; APPLICANT: Henriksen, Dennis

; APPLICANT: Partridge, Bruce

; APPLICANT: Manning, Shane

; TITLE OF INVENTION: Enzymatic Method for Modification of

; TITLE OF INVENTION: Recombinant Polypeptides

; NUMBER OF SEQUENCES: 26

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Merchant & Gould

; STREET: 3100 No. 5512459west Center

; CITY: Minneapolis

; STATE: MN

; COUNTRY: USA

; ZIP: 55402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/095,162

; FILING DATE: 20-JUL-1993

; CLASSIFICATION: 514

; ATTORNEY/AGENT INFORMATION:

; NAME: Nelson, Albin J.

; REGISTRATION NUMBER: 28,659

; REFERENCE/DOCKET NUMBER: 8648.32-US01

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 612-332-5300

; TELEFAX: 612-332-9081

; INFORMATION FOR SEQ ID NO: 4:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 28 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; IMMEDIATE SOURCE:

; CLONE: GLP1 (7-34)

US-08-095-162-4

Query Match 78.0%; Score 32; DB 1; Length 28;
Best Local Similarity 30.4%; Pred. No. 0.36;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 8

US-08-470-220A-4

; Sequence 4, Application US/08470220A

; Patent No. 5707826

; GENERAL INFORMATION:

; APPLICANT: Wagner, Fred W.

; APPLICANT: Stout, Jay

; APPLICANT: Henriksen, Dennis

; APPLICANT: Partridge, Bruce

; APPLICANT: Manning, Shane

; TITLE OF INVENTION: Enzymatic Method for Modification of

; TITLE OF INVENTION: Recombinant Polypeptides

; NUMBER OF SEQUENCES: 26

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Merchant & Gould

; STREET: 3100 No. 5707826west Center

; CITY: Minneapolis

; STATE: MN

; COUNTRY: USA

; ZIP: 55402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/470,220A

; FILING DATE: 06-JUN-1995

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/095,162

; FILING DATE: 20-JUL-1993

; ATTORNEY/AGENT INFORMATION:

; NAME: Nelson, Albin J.

; REGISTRATION NUMBER: 28,659

; REFERENCE/DOCKET NUMBER: 8648.32-US01

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 612-332-5300

; TELEFAX: 612-332-9081

; INFORMATION FOR SEQ ID NO: 4:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 28 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; IMMEDIATE SOURCE:

; CLONE: GLP1 (7-34)

US-08-470-220A-4

Query Match 78.0%; Score 32; DB 1; Length 28;

Best Local Similarity 30.4%; Pred. No. 0.36;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||

Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 9

US-08-967-374-4

; Sequence 4, Application US/08967374

; Patent No. 6037143

; GENERAL INFORMATION:

; APPLICANT: Wagner, Fred W.

; APPLICANT: Stout, Jay

; APPLICANT: Henriksen, Dennis

; APPLICANT: Partridge, Bruce

; APPLICANT: Manning, Shane

; TITLE OF INVENTION: Enzymatic Method for Modification of

; TITLE OF INVENTION: Recombinant Polypeptides

; NUMBER OF SEQUENCES: 26

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Merchant & Gould

; STREET: 3100 No. 6037143west Center

; CITY: Minneapolis

; STATE: MN

; COUNTRY: USA

; ZIP: 55402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/967,374

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/520,485

; FILING DATE: 29-AUG-1995

; ATTORNEY/AGENT INFORMATION:

; NAME: Carter, Charles G.

; REGISTRATION NUMBER: 35,093

; REFERENCE/DOCKET NUMBER: 8648.32-USD1

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 612-332-5300

; TELEFAX: 612-332-9081

; INFORMATION FOR SEQ ID NO: 4:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 28 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; IMMEDIATE SOURCE:

; CLONE: GLP1 (7-34)

US-08-967-374-4

Query Match 78.0%; Score 32; DB 2; Length 28;

Best Local Similarity 30.4%; Pred. No. 0.36;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23

| | || | ||

Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

US-09-943-084-7
; Sequence 7, Application US/09943084
; Patent No. 6828303
; GENERAL INFORMATION:
; APPLICANT: Kim, Yesook
; Lambert, William J.
; Qi, Hong
; Gelfand, Robert A.
; Geoghegan, Kieran F.
; Danley, Dennis E.
; TITLE OF INVENTION: Prolonged Delivery of Peptides
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pfizer Inc
; STREET: 235 East 42nd Street, 20th Floor
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10017-5755
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/943,084
; FILING DATE: 31-Aug-2001
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/181,655
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Sheyka, Robert F.
; REGISTRATION NUMBER: 31,304
; REFERENCE/DOCKET NUMBER: PC8391
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212)573-1189
; TELEFAX: (212)573-1939
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 27 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
; ORGANISM: N/A
; STRAIN: N/A
; INDIVIDUAL ISOLATE: N/A
; HAPLOTYPE: N/A
; CELL LINE: N/A
; IMMEDIATE SOURCE:
; LIBRARY: N/A
; CLONE: N/A
; POSITION IN GENOME:
; CHROMOSOME/SEGMENT: N/A
; MAP POSITION: N/A

RESULT 10

US-08-915-918A-3

; Sequence 3, Application US/08915918A

; Patent No. 6277819

; GENERAL INFORMATION:

; APPLICANT: Efendic, Suad

; TITLE OF INVENTION: USE OF GLP-1 OR ANALOGS IN TREATMENT OF

; TITLE OF INVENTION: MYOCARDIAL INFARCTION

; NUMBER OF SEQUENCES: 6

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: BRINKS, HOFER, GILSON & LIONE

; STREET: NBC Tower - Suite 3600, 455 N. Cityfront

; STREET: Plaza Drive

; CITY: Chicago

; STATE: Illinois

; COUNTRY: USA

; ZIP: 60611-5599

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/915,918A

; FILING DATE: 21-AUG-1997

; CLASSIFICATION: 514

; ATTORNEY/AGENT INFORMATION:

; NAME: Martin, Alice O.

; REGISTRATION NUMBER: 35,601

; REFERENCE/DOCKET NUMBER: 8792/28

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 312-321-4200

; TELEFAX: 312-321-4299

; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 28 amino acids

; TYPE: amino acid

; STRANDEDNESS:

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

US-08-915-918A-3

Query Match 78.0%; Score 32; DB 2; Length 28;

Best Local Similarity 30.4%; Pred. No. 0.36;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23

| | || | ||

Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 11

US-08-472-349-5

; Sequence 5, Application US/08472349

; Patent No. 6284727

; GENERAL INFORMATION:

; APPLICANT: Kim, Yesook

; APPLICANT: Lambert, William J.

; APPLICANT: Qi, Hong

; APPLICANT: Gelfand, Robert A.

; APPLICANT: Geoghegan, Kieran F.

```

; APPLICANT: Danley, Dennis E.
; TITLE OF INVENTION: Prolonged Delivery of Peptides
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pfizer Inc
; STREET: 235 East 42nd Street, 20th Floor
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10017-5755
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,349
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/181,655
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sheyka, Robert F.
; REGISTRATION NUMBER: 31,304
; REFERENCE/DOCKET NUMBER: PC8391
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212)573-1189
; TELEFAX: (212)573-1939
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
; ORGANISM: N/A
; STRAIN: N/A
; INDIVIDUAL ISOLATE: N/A
; HAPLOTYPE: N/A
; CELL LINE: N/A
; IMMEDIATE SOURCE:
; LIBRARY: N/A
; CLONE: N/A
; POSITION IN GENOME:
; CHROMOSOME/SEGMENT: N/A
; MAP POSITION: N/A
US-08-472-349-5

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Query Match          78.0%; Score 32; DB 2; Length 28;
Best Local Similarity 30.4%; Pred. No. 0.36;
Matches      7; Conservative    0; Mismatches    16; Indels      0; Gaps      0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
          | | || |               ||
Db      1 HAEGTFTSDVSSYLEGQAAKEFI 23

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RESULT 12

US-09-209-799D-8

; Sequence 8, Application US/09209799D

; Patent No. 6380357

; GENERAL INFORMATION:

; APPLICANT: Hermeling, Ronald

; APPLICANT: Hoffmann, James

; APPLICANT: Narasimhan, Chakravarthy

; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS

; FILE REFERENCE: X-10242

; CURRENT APPLICATION NUMBER: US/09/209,799D

; CURRENT FILING DATE: 1998-12-11

; NUMBER OF SEQ ID NOS: 29

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 8

; LENGTH: 28

; TYPE: PRT

; ORGANISM: Artificial

; FEATURE:

; OTHER INFORMATION: synthetic construct

US-09-209-799D-8

Query Match 78.0%; Score 32; DB 2; Length 28;

Best Local Similarity 30.4%; Pred. No. 0.36;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23

| | || | ||

Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 13

US-09-505-991-4

; Sequence 4, Application US/09505991

; Patent No. 6403361

; GENERAL INFORMATION:

; APPLICANT: Wagner, Fred W.

; Stout, Jay

; Henriksen, Dennis

; Partridge, Bruce

; Manning, Shane

; TITLE OF INVENTION: Enzymatic Method for Modification of
Recombinant Polypeptides

; NUMBER OF SEQUENCES: 26

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Merchant & Gould

; STREET: 3100 No. 6403361west Center

; CITY: Minneapolis

; STATE: MN

; COUNTRY: USA

; ZIP: 55402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/505,991

; FILING DATE: 17-Feb-2000

; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/520,485
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Carter, Charles G.
; REGISTRATION NUMBER: 35,093
; REFERENCE/DOCKET NUMBER: 8648.32-USD1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-332-5300
; TELEFAX: 612-332-9081
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; IMMEDIATE SOURCE:
; CLONE: GLP1 (7-34)
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-505-991-4

Query Match 78.0%; Score 32; DB 2; Length 28;
Best Local Similarity 30.4%; Pred. No. 0.36;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 14

US-09-212-663-5

; Sequence 5, Application US/09212663
; Patent No. 6461834
; GENERAL INFORMATION:
; APPLICANT: DORMADY, Dan
; APPLICANT: STOUT, Jay S.
; APPLICANT: STRYDOM, Daniel J.
; APPLICANT: HOLMQUIST, Barton
; APPLICANT: WAGNER, Fred W.
; TITLE OF INVENTION: ENZYMATIC AMIDATION OF PEPTIDES
; FILE REFERENCE: 089187/0162
; CURRENT APPLICATION NUMBER: US/09/212,663
; CURRENT FILING DATE: 1998-12-16
; PRIOR APPLICATION NUMBER: US 60/107,311
; PRIOR FILING DATE: 1998-11-06
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Escherichia coli
US-09-212-663-5

Query Match 78.0%; Score 32; DB 2; Length 28;
Best Local Similarity 30.4%; Pred. No. 0.36;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||

Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 15

US-09-997-792A-6

; Sequence 6, Application US/09997792A

; Patent No. 655521

; GENERAL INFORMATION:

; APPLICANT: ELI LILLY and COMPANY

; TITLE OF INVENTION: Glucagon-Like Peptide-1 Crystals

; FILE REFERENCE: X-10242A

; CURRENT APPLICATION NUMBER: US/09/997,792A

; CURRENT FILING DATE: 2002-09-30

; PRIOR APPLICATION NUMBER: US 60/069,728

; PRIOR FILING DATE: 1997-12-16

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 6

; LENGTH: 28

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic Construct

US-09-997-792A-6

Query Match 78.0%; Score 32; DB 2; Length 28;

Best Local Similarity 30.4%; Pred. No. 0.36;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23

| | || | ||

Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 16

US-10-170-301-2

; Sequence 2, Application US/10170301

; Patent No. 6573237

; GENERAL INFORMATION:

; APPLICANT: Rinella, Joseph

; TITLE OF INVENTION: Protein Formulations

; FILE REFERENCE: X12473A

; CURRENT APPLICATION NUMBER: US/10/170,301

; CURRENT FILING DATE: 2002-06-12

; NUMBER OF SEQ ID NOS: 3

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 2

; LENGTH: 28

; TYPE: PRT

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: MISC_FEATURE

; LOCATION: (28)..(28)

; OTHER INFORMATION: Xaa = Lys or Lys-Gly

US-10-170-301-2

Query Match 78.0%; Score 32; DB 2; Length 28;

Best Local Similarity 30.4%; Pred. No. 0.36;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23

Db | | | | ||
1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 17

US-09-943-084-5

; Sequence 5, Application US/09943084

; Patent No. 6828303

; GENERAL INFORMATION:

; APPLICANT: Kim, Yesook
; Lambert, William J.
; Qi, Hong
; Gelfand, Robert A.
; Geoghegan, Kieran F.
; Danley, Dennis E.

; TITLE OF INVENTION: Prolonged Delivery of Peptides

; NUMBER OF SEQUENCES: 7

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Pfizer Inc
; STREET: 235 East 42nd Street, 20th Floor
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10017-5755

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/943,084
; FILING DATE: 31-Aug-2001
; CLASSIFICATION: 514

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US/08/181,655
; FILING DATE: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: Sheyka, Robert F.
; REGISTRATION NUMBER: 31,304
; REFERENCE/DOCKET NUMBER: PC8391

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (212)573-1189
; TELEFAX: (212)573-1939
; TELEX: N/A

; INFORMATION FOR SEQ ID NO: 5:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 28 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; HYPOTHETICAL: NO

; ANTI-SENSE: NO

; FRAGMENT TYPE: N-terminal

; ORIGINAL SOURCE:

; ORGANISM: N/A
; STRAIN: N/A
; INDIVIDUAL ISOLATE: N/A
; HAPLOTYPE: N/A
; CELL LINE: N/A

; IMMEDIATE SOURCE:

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;          LIBRARY: N/A
;          CLONE: N/A
;          POSITION IN GENOME:
;          CHROMOSOME/SEGMENT: N/A
;          MAP POSITION: N/A
;          SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-943-084-5

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Query Match          78.0%; Score 32; DB 2; Length 28;
Best Local Similarity 30.4%; Pred. No. 0.36;
Matches      7; Conservative      0; Mismatches    16; Indels      0; Gaps      0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
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Db      1 HAEGTFTSDVSSYLEGQAAKEFI 23

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RESULT 18

PCT-US95-15800-21

; Sequence 21, Application PC/TUS9515800

; GENERAL INFORMATION:

; APPLICANT: BioNebraska, Inc.

; TITLE OF INVENTION: PRODUCTION OF PEPTIDES USING

; TITLE OF INVENTION: RECOMBINANT FUSION PROTEIN CONSTRICTS

; NUMBER OF SEQUENCES: 33

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Merchant & Gould

; STREET: 3100 Norwest Center, 90 S. 7th Street

; CITY: Minneapolis

; STATE: MN

; COUNTRY: U.S.A.

; ZIP: 55402

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSEQ Version 1.5

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: PCT/US95/15800

; FILING DATE: 07-DEC-1995

[start](#) | [next page](#)

SCORE 1.3 BuildDate: 11/17/2006

Score Home	Retrieve Application	SCORE System	SCORE	Comments /
Page	List	Overview	FAQ	Suggestions

[start](#) | [next page](#)

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Run on:      January 23, 2007, 03:22:49 ; Search time 183 Seconds
              (without alignments)
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Title: US-09-757-788A-1
Perfect score: 41
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2097797 seqs, 463214858 residues

Total number of hits satisfying chosen parameters: 2097797

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Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Post-processing: Minimum Match .0%
                  Maximum Match 100%
                  Listing first 100 summaries
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3:  /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
4:  /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
5:  /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
6:  /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US11_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	Query	Match	Length	DB	ID	Description
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1	33	80.5	28	6	US-11-031-851-9	Sequence 9, Appli
2	33	80.5	29	6	US-11-031-851-3	Sequence 3, Appli
3	33	80.5	29	6	US-11-031-851-10	Sequence 10, Appl
4	33	80.5	30	4	US-10-761-717-7	Sequence 7, Appli
5	33	80.5	30	4	US-10-761-717-12	Sequence 12, Appl
6	33	80.5	31	3	US-09-209-799D-20	Sequence 20, Appl
7	33	80.5	31	3	US-09-997-792-20	Sequence 20, Appl
8	32	78.0	27	3	US-09-943-084-7	Sequence 7, Appli
9	32	78.0	27	5	US-10-847-220-32	Sequence 32, Appl
10	32	78.0	28	3	US-09-767-981-1	Sequence 1, Appli
11	32	78.0	28	3	US-09-209-799D-8	Sequence 8, Appli
12	32	78.0	28	3	US-09-772-607-2	Sequence 2, Appli
13	32	78.0	28	3	US-09-858-880-3	Sequence 3, Appli
14	32	78.0	28	3	US-09-997-792-8	Sequence 8, Appli
15	32	78.0	28	3	US-09-943-084-5	Sequence 5, Appli
16	32	78.0	28	4	US-10-169-657-3	Sequence 3, Appli
17	32	78.0	28	4	US-10-169-657-6	Sequence 6, Appli
18	32	78.0	28	4	US-10-170-301-2	Sequence 2, Appli
19	32	78.0	28	4	US-10-378-094-7	Sequence 7, Appli
20	32	78.0	28	4	US-10-215-272-23	Sequence 23, Appl
21	32	78.0	28	4	US-10-393-524A-23	Sequence 23, Appl
22	32	78.0	28	4	US-10-716-326-23	Sequence 23, Appl
23	32	78.0	28	4	US-10-811-646-3	Sequence 3, Appli
24	32	78.0	28	5	US-10-847-220-31	Sequence 31, Appl
25	32	78.0	28	5	US-10-715-976-23	Sequence 23, Appl
26	32	78.0	28	5	US-10-844-598-1	Sequence 1, Appli
27	32	78.0	28	5	US-10-517-563-21	Sequence 21, Appl
28	32	78.0	28	6	US-11-006-990A-5	Sequence 5, Appli
29	32	78.0	28	6	US-11-006-990A-7	Sequence 7, Appli
30	32	78.0	28	6	US-11-031-851-2	Sequence 2, Appli
31	32	78.0	28	6	US-11-031-851-4	Sequence 4, Appli
32	32	78.0	28	6	US-11-031-851-6	Sequence 6, Appli
33	32	78.0	28	6	US-11-293-676-4	Sequence 4, Appli
34	32	78.0	29	3	US-09-209-799D-3	Sequence 3, Appli
35	32	78.0	29	3	US-09-209-799D-9	Sequence 9, Appli
36	32	78.0	29	3	US-09-834-229A-3	Sequence 3, Appli
37	32	78.0	29	3	US-09-997-792-3	Sequence 3, Appli
38	32	78.0	29	3	US-09-997-792-9	Sequence 9, Appli
39	32	78.0	29	3	US-09-943-084-4	Sequence 4, Appli
40	32	78.0	29	4	US-10-169-657-7	Sequence 7, Appli
41	32	78.0	29	4	US-10-378-094-8	Sequence 8, Appli
42	32	78.0	29	4	US-10-215-272-24	Sequence 24, Appl
43	32	78.0	29	4	US-10-393-524A-24	Sequence 24, Appl
44	32	78.0	29	4	US-10-716-326-24	Sequence 24, Appl
45	32	78.0	29	5	US-10-656-093C-75	Sequence 75, Appl
46	32	78.0	29	5	US-10-715-976-24	Sequence 24, Appl
47	32	78.0	29	5	US-10-517-563-22	Sequence 22, Appl
48	32	78.0	29	6	US-11-006-990A-4	Sequence 4, Appli
49	32	78.0	29	6	US-11-006-990A-8	Sequence 8, Appli
50	32	78.0	29	6	US-11-031-851-1	Sequence 1, Appli
51	32	78.0	29	6	US-11-031-851-8	Sequence 8, Appli
52	32	78.0	29	6	US-11-031-851-16	Sequence 16, Appl
53	32	78.0	30	3	US-09-209-799D-10	Sequence 10, Appl
54	32	78.0	30	3	US-09-851-738-4	Sequence 4, Appli
55	32	78.0	30	3	US-09-858-880-1	Sequence 1, Appli
56	32	78.0	30	3	US-09-858-880-2	Sequence 2, Appli
57	32	78.0	30	3	US-09-805-507-4	Sequence 4, Appli
58	32	78.0	30	3	US-09-859-804-4	Sequence 4, Appli
59	32	78.0	30	3	US-09-982-978-4	Sequence 4, Appli
60	32	78.0	30	3	US-09-953-021B-4	Sequence 4, Appli

61	32	78.0	30	3	US-09-834-229A-5	Sequence 5, Appli
62	32	78.0	30	3	US-09-997-792-10	Sequence 10, Appl
63	32	78.0	30	3	US-09-943-084-3	Sequence 3, Appli
64	32	78.0	30	4	US-10-072-540A-4	Sequence 4, Appli
65	32	78.0	30	4	US-10-125-255-1	Sequence 1, Appli
66	32	78.0	30	4	US-10-091-258-4	Sequence 4, Appli
67	32	78.0	30	4	US-10-055-259-4	Sequence 4, Appli
68	32	78.0	30	4	US-10-265-345A-2	Sequence 2, Appli
69	32	78.0	30	4	US-10-265-345A-9	Sequence 9, Appli
70	32	78.0	30	4	US-10-265-345A-10	Sequence 10, Appl
71	32	78.0	30	4	US-10-097-230-3	Sequence 3, Appli
72	32	78.0	30	4	US-10-201-288-28	Sequence 28, Appl
73	32	78.0	30	4	US-10-276-772-27	Sequence 27, Appl
74	32	78.0	30	4	US-10-276-772-28	Sequence 28, Appl
75	32	78.0	30	4	US-10-276-772-29	Sequence 29, Appl
76	32	78.0	30	4	US-10-276-772-30	Sequence 30, Appl
77	32	78.0	30	4	US-10-276-772-31	Sequence 31, Appl
78	32	78.0	30	4	US-10-378-094-48	Sequence 48, Appl
79	32	78.0	30	4	US-10-345-751-2	Sequence 2, Appli
80	32	78.0	30	4	US-10-345-751-9	Sequence 9, Appli
81	32	78.0	30	4	US-10-345-751-10	Sequence 10, Appl
82	32	78.0	30	4	US-10-322-839-4	Sequence 4, Appli
83	32	78.0	30	4	US-10-215-272-25	Sequence 25, Appl
84	32	78.0	30	4	US-10-629-261-1	Sequence 1, Appli
85	32	78.0	30	4	US-10-629-261-32	Sequence 32, Appl
86	32	78.0	30	4	US-10-629-261-71	Sequence 71, Appl
87	32	78.0	30	4	US-10-629-261-72	Sequence 72, Appl
88	32	78.0	30	4	US-10-393-524A-18	Sequence 18, Appl
89	32	78.0	30	4	US-10-393-524A-19	Sequence 19, Appl
90	32	78.0	30	4	US-10-393-524A-20	Sequence 20, Appl
91	32	78.0	30	4	US-10-393-524A-21	Sequence 21, Appl
92	32	78.0	30	4	US-10-393-524A-25	Sequence 25, Appl
93	32	78.0	30	4	US-10-291-226-114	Sequence 114, App
94	32	78.0	30	4	US-10-769-080-1	Sequence 1, Appli
95	32	78.0	30	4	US-10-671-340-1	Sequence 1, Appli
96	32	78.0	30	4	US-10-679-746-1	Sequence 1, Appli
97	32	78.0	30	4	US-10-704-409-9	Sequence 9, Appli
98	32	78.0	30	4	US-10-716-326-25	Sequence 25, Appl
99	32	78.0	30	4	US-10-761-717-1	Sequence 1, Appli
100	32	78.0	30	4	US-10-761-717-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1

US-11-031-851-9

; Sequence 9, Application US/11031851

; Publication No. US20060014685A1

; GENERAL INFORMATION:

; APPLICANT: PERI, KRISHNA

; APPLICANT: ABRAN, DANIEL

; APPLICANT: HABI, ABDELKIM

; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 ANALOGS WITH

; TITLE OF INVENTION: LONG DURATION OF ACTION

; FILE REFERENCE: GOUD:056US

; CURRENT APPLICATION NUMBER: US/11/031,851

; CURRENT FILING DATE: 2005-01-07

; NUMBER OF SEQ ID NOS: 23

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 9

; LENGTH: 28
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 ; OTHER INFORMATION: Peptide
 US-11-031-851-9

Query Match 80.5%; Score 33; DB 6; Length 28;
 Best Local Similarity 30.4%; Pred. No. 0.73;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | ||
 Db 1 HAEGTFTSDVSSYLEGQAAKAFI 23

RESULT 2

US-11-031-851-3

; Sequence 3, Application US/11031851
 ; Publication No. US20060014685A1
 ; GENERAL INFORMATION:
 ; APPLICANT: PERI, KRISHNA
 ; APPLICANT: ABRAN, DANIEL
 ; APPLICANT: HABI, ABDELKIM
 ; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 ANALOGS WITH
 ; TITLE OF INVENTION: LONG DURATION OF ACTION
 ; FILE REFERENCE: GÖUD:056US
 ; CURRENT APPLICATION NUMBER: US/11/031,851
 ; CURRENT FILING DATE: 2005-01-07
 ; NUMBER OF SEQ ID NOS: 23
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 3
 ; LENGTH: 29
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 ; OTHER INFORMATION: Peptide
 ; FEATURE:
 ; NAME/KEY: MOD_RES
 ; LOCATION: (29)
 ; OTHER INFORMATION: Aib
 US-11-031-851-3

Query Match 80.5%; Score 33; DB 6; Length 29;
 Best Local Similarity 30.4%; Pred. No. 0.76;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | ||
 Db 1 HAEGTFTSDVSSYLEGQAAKAFI 23

RESULT 3

US-11-031-851-10

; Sequence 10, Application US/11031851
 ; Publication No. US20060014685A1
 ; GENERAL INFORMATION:
 ; APPLICANT: PERI, KRISHNA
 ; APPLICANT: ABRAN, DANIEL

; APPLICANT: HABI, ABDELKIM
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 ANALOGS WITH
; TITLE OF INVENTION: LONG DURATION OF ACTION
; FILE REFERENCE: GOUD:056US
; CURRENT APPLICATION NUMBER: US/11/031,851
; CURRENT FILING DATE: 2005-01-07
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Peptide
US-11-031-851-10

Query Match 80.5%; Score 33; DB 6; Length 29;
Best Local Similarity 30.4%; Pred. No. 0.76;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKAFI 23

RESULT 4

US-10-761-717-7

; Sequence 7, Application US/10761717
; Publication No. US20040146985A1
; GENERAL INFORMATION:
; APPLICANT: Shanghai Hua-Yi Bio-Tech Lab
; APPLICANT: Sun, Yukun
; APPLICANT: Wu, Dengxi
; APPLICANT: Wu, Aizhen
; APPLICANT: Zhu, Zhiyong
; APPLICANT: Yu, Gang
; APPLICANT: Zhou, Jiaxiang
; APPLICANT: Zhao, Shaoling
; TITLE OF INVENTION: A Method of Producing Insulinotropic GLP-1 (7-36) Polypeptide
; TITLE OF INVENTION: and/or GLP-1 Analogs
; FILE REFERENCE: 291-0002US
; CURRENT APPLICATION NUMBER: US/10/761,717
; CURRENT FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: CN01126278.8
; PRIOR FILING DATE: 2001-07-19
; PRIOR APPLICATION NUMBER: PCT/CN02/00502
; PRIOR FILING DATE: 2002-07-17
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
; LENGTH: 30
; TYPE: PRT
; ORGANISM: artificial
; FEATURE:
; OTHER INFORMATION: This sequence contains one or more substituted amino acids
; OTHER INFORMATION: relative to the wild-type sequence.
US-10-761-717-7

Query Match 80.5%; Score 33; DB 4; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.78;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXXFI 23
          | | || |                ||
Db      1 HAEGTFTSDASSYLEGQAAKEFI 23
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RESULT 5

US-10-761-717-12

; Sequence 12, Application US/10761717

; Publication No. US20040146985A1

; GENERAL INFORMATION:

; APPLICANT: Shanghai Hua-Yi Bio-Tech Lab

; APPLICANT: Sun, Yukun

; APPLICANT: Wu, Dengxi

; APPLICANT: Wu, Aizhen

; APPLICANT: Zhu, Zhiyong

; APPLICANT: Yu, Gang

; APPLICANT: Zhou, Jiaxiang

; APPLICANT: Zhao, Shaoling

; TITLE OF INVENTION: A Method of Producing Insulinotropic GLP-1 (7-36) Polypeptide

; TITLE OF INVENTION: and/or GLP-1 Analogs

; FILE REFERENCE: 291-0002US

; CURRENT APPLICATION NUMBER: US/10/761,717

; CURRENT FILING DATE: 2004-01-20

; PRIOR APPLICATION NUMBER: CN01126278.8

; PRIOR FILING DATE: 2001-07-19

; PRIOR APPLICATION NUMBER: PCT/CN02/00502

; PRIOR FILING DATE: 2002-07-17

; NUMBER OF SEQ ID NOS: 31

; SOFTWARE: PatentIn version 3.2

; SEQ ID NO 12

; LENGTH: 30

; TYPE: PRT

; ORGANISM: artificial

; FEATURE:

; OTHER INFORMATION: This sequence contains one or more substituted amino acids

; OTHER INFORMATION: relative to the wild-type sequence.

US-10-761-717-12

Query Match 80.5%; Score 33; DB 4; Length 30;

Best Local Similarity 30.4%; Pred. No. 0.78;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXXFI 23
          | | || |                ||
Db      1 HAEGTFTSDVSSYLEGQAAKAFI 23
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RESULT 6

US-09-209-799D-20

; Sequence 20, Application US/09209799D

; Publication No. US20010014666A1

; GENERAL INFORMATION:

; APPLICANT: Hermeling, Ronald

; APPLICANT: Hoffmann, James

; APPLICANT: Narasimhan, Chakravarthy

; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS

; FILE REFERENCE: X-10242

; CURRENT APPLICATION NUMBER: US/09/209,799D

; CURRENT FILING DATE: 1998-12-11

; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: synthetic construct
US-09-209-799D-20

Query Match 80.5%; Score 33; DB 3; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.81;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HATGTFTSDVSSYLEGQAAKEFI 23

RESULT 7

US-09-997-792-20

; Sequence 20, Application US/09997792
; Publication No. US20030045464A1
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
; APPLICANT: Narasimhan, Chakravarthy
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
; FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/997,792
; CURRENT FILING DATE: 2001-11-30
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic construct
US-09-997-792-20

Query Match 80.5%; Score 33; DB 3; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.81;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HATGTFTSDVSSYLEGQAAKEFI 23

RESULT 8

US-09-943-084-7

; Sequence 7, Application US/09943084
; Publication No. US20030050237A1
; GENERAL INFORMATION:
; APPLICANT: Kim, Yesook
; Lambert, William J.
; Qi, Hong
; Gelfand, Robert A.
; Geoghegan, Kieran F.
; Danley, Dennis E.

```

; TITLE OF INVENTION: Prolonged Delivery of Peptides
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pfizer Inc
; STREET: 235 East 42nd Street, 20th Floor
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10017-5755
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/943,084
; FILING DATE: 31-Aug-2001
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/181,655
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Sheyka, Robert F.
; REGISTRATION NUMBER: 31,304
; REFERENCE/DOCKET NUMBER: PC8391
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212)573-1189
; TELEFAX: (212)573-1939
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 27 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
; ORGANISM: N/A
; STRAIN: N/A
; INDIVIDUAL ISOLATE: N/A
; HAPLOTYPE: N/A
; CELL LINE: N/A
; IMMEDIATE SOURCE:
; LIBRARY: N/A
; CLONE: N/A
; POSITION IN GENOME:
; CHROMOSOME/SEGMENT: N/A
; MAP POSITION: N/A
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-943-084-7

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Query Match          78.0%; Score 32; DB 3; Length 27;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches      7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXXFI 23
        | | || |                ||
Db      1 HAEGTFTSDVSSYLEGQAAKEFI 23

```

RESULT 9

US-10-847-220-32

; Sequence 32, Application US/10847220

; Publication No. US20050049177A1

; GENERAL INFORMATION:

; APPLICANT: Bachovchin, William W.

; APPLICANT: Lai, Hung-sen

; APPLICANT: Sanford, David George

; TITLE OF INVENTION: STABLE ANALOGS OF PEPTIDE AND

; TITLE OF INVENTION: POLYPEPTIDE THERAPEUTICS

; FILE REFERENCE: TUU-P01-011

; CURRENT APPLICATION NUMBER: US/10/847,220

; CURRENT FILING DATE: 2004-05-17

; PRIOR APPLICATION NUMBER: US 60/471,411

; PRIOR FILING DATE: 2003-05-15

; NUMBER OF SEQ ID NOS: 36

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 32

; LENGTH: 27

; TYPE: PRT

; ORGANISM: Homo sapiens

US-10-847-220-32

Query Match 78.0%; Score 32; DB 5; Length 27;

Best Local Similarity 30.4%; Pred. No. 1.3;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23

| | | | | | |

Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 10

US-09-767-981-1

; Sequence 1, Application US/09767981

; Publication No. US20010006943A1

; GENERAL INFORMATION:

; APPLICANT: Ejvind, Jensen

; APPLICANT: Jorgensen, Klavs Holger

; TITLE OF INVENTION: Protracted GLP-1 Compositions

; FILE REFERENCE: 4343.214-US

; CURRENT APPLICATION NUMBER: US/09/767,981

; CURRENT FILING DATE: 2001-01-23

; PRIOR APPLICATION NUMBER: US 08/860,103

; PRIOR FILING DATE: 1997-06-17

; PRIOR APPLICATION NUMBER: Danish Application PA 1478/94

; PRIOR FILING DATE: 1994-12-23

; PRIOR APPLICATION NUMBER: PCT/DK99/00263

; PRIOR FILING DATE: 1995-12-21

; NUMBER OF SEQ ID NOS: 1

; SOFTWARE: PatentIn version 3.2

; SEQ ID NO 1

; LENGTH: 28

; TYPE: PRT

; ORGANISM: Homo sapiens

US-09-767-981-1

Query Match 78.0%; Score 32; DB 3; Length 28;

Best Local Similarity 30.4%; Pred. No. 1.3;

Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXFI 23
          | | || |
Db      1 HAEGTFTSDVSSYLEGQAAKEFI 23
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RESULT 11

US-09-209-799D-8

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; Sequence 8, Application US/09209799D
; Publication No. US20010014666A1
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
; APPLICANT: Narasimhan, Chakravarthy
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
; FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/209,799D
; CURRENT FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: synthetic construct
US-09-209-799D-8
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Query Match 78.0%; Score 32; DB 3; Length 28;
 Best Local Similarity 30.4%; Pred. No. 1.3;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXFI 23
          | | || |
Db      1 HAEGTFTSDVSSYLEGQAAKEFI 23
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RESULT 12

US-09-772-607-2

```
; Sequence 2, Application US/09772607
; Publication No. US20010016643A1
; GENERAL INFORMATION:
; APPLICANT: Jonassen, Ib
; APPLICANT: Havelund, Svend
; APPLICANT: Hansen, Per Hertz
; APPLICANT: Kurtzhals, Peter
; APPLICANT: Halstrom, John B.
; TITLE OF INVENTION: Peptide Derivatives
; FILE REFERENCE: 4409.214-US
; CURRENT APPLICATION NUMBER: US/09/772,607
; CURRENT FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 09/068,822
; PRIOR FILING DATE: 1998-05-14
; PRIOR APPLICATION NUMBER: PCT/DK96/00106
; PRIOR FILING DATE: 1996-03-18
; PRIOR APPLICATION NUMBER: DK 275/95
; PRIOR FILING DATE: 1995-03-18
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
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; LENGTH: 28
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-09-772-607-2

Query Match 78.0%; Score 32; DB 3; Length 28;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 13

US-09-858-880-3

; Sequence 3, Application US/09858880
; Publication No. US20020061838A1
; GENERAL INFORMATION:
; APPLICANT: Holmquist, Barton
; APPLICANT: Dormady, Daniel
; TITLE OF INVENTION: Peptide Pharmaceutical Formulations
; FILE REFERENCE: 1627.020US1
; CURRENT APPLICATION NUMBER: US/09/858,880
; CURRENT FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/205,377
; PRIOR FILING DATE: 2000-05-17
; PRIOR APPLICATION NUMBER: US 60/205,262
; PRIOR FILING DATE: 2000-05-19
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: A GLP-1 derivative
US-09-858-880-3

Query Match 78.0%; Score 32; DB 3; Length 28;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 14

US-09-997-792-8

; Sequence 8, Application US/09997792
; Publication No. US20030045464A1
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
; APPLICANT: Narasimhan, Chakravarthy
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
; FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/997,792

; CURRENT FILING DATE: 2001-11-30
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic construct
US-09-997-792-8

Query Match 78.0%; Score 32; DB 3; Length 28;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | | | |
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 15

US-09-943-084-5

; Sequence 5, Application US/09943084

; Publication No. US20030050237A1

; GENERAL INFORMATION:

; APPLICANT: Kim, Yesook
; Lambert, William J.
; Qi, Hong
; Gelfand, Robert A.
; Geoghegan, Kieran F.
; Danley, Dennis E.

; TITLE OF INVENTION: Prolonged Delivery of Peptides

; NUMBER OF SEQUENCES: 7

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Pfizer Inc
; STREET: 235 East 42nd Street, 20th Floor
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10017-5755

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/943,084

; FILING DATE: 31-Aug-2001

; CLASSIFICATION: 514

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US/08/181,655

; FILING DATE: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: Sheyka, Robert F.
; REGISTRATION NUMBER: 31,304
; REFERENCE/DOCKET NUMBER: PC8391

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (212)573-1189

; TELEFAX: (212)573-1939

; TELEX: N/A

; INFORMATION FOR SEQ ID NO: 5:


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; SEQUENCE CHARACTERISTICS:
;     LENGTH: 28 amino acids
;     TYPE: amino acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
;     ORGANISM: N/A
;     STRAIN: N/A
;     INDIVIDUAL ISOLATE: N/A
;     HAPLOTYPE: N/A
;     CELL LINE: N/A
; IMMEDIATE SOURCE:
;     LIBRARY: N/A
;     CLONE: N/A
; POSITION IN GENOME:
;     CHROMOSOME/SEGMENT: N/A
;     MAP POSITION: N/A
; SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-943-084-5

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Query Match          78.0%; Score 32; DB 3; Length 28;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches      7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

```

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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
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Db      1 HAEGTFTSDVSSYLEGQAAKEFI 23

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RESULT 16

US-10-169-657-3

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; Sequence 3, Application US/10169657
; Publication No. US20030060412A1
; GENERAL INFORMATION:
; APPLICANT: Eli Lilly and Company
; TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds
; FILE REFERENCE: X-11708
; CURRENT APPLICATION NUMBER: US/10/169,657
; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: US 60/178,438
; PRIOR FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/224,058
; PRIOR FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
;     LENGTH: 28
;     TYPE: PRT
;     ORGANISM: Artificial Sequence
;     FEATURE:
;     OTHER INFORMATION: synthetic construct
;     FEATURE:
;     NAME/KEY: VARIANT
;     LOCATION: (28)..(28)
;     OTHER INFORMATION: X at position 28 is Lys-COOH and Lys-Gly-COOH
US-10-169-657-3

```

Query Match 78.0%; Score 32; DB 4; Length 28;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 17

US-10-169-657-6

; Sequence 6, Application US/10169657
; Publication No. US20030060412A1
; GENERAL INFORMATION:
; APPLICANT: Eli Lilly and Company
; TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds
; FILE REFERENCE: X-11708
; CURRENT APPLICATION NUMBER: US/10/169,657
; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: US 60/178,438
; PRIOR FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/224,058
; PRIOR FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic construct
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)..(28)
; OTHER INFORMATION: The last 3 amino acids of GLP-1 (7-37) are deleted
US-10-169-657-6

Query Match 78.0%; Score 32; DB 4; Length 28;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 18

US-10-170-301-2

; Sequence 2, Application US/10170301
; Publication No. US20030069182A1
; GENERAL INFORMATION:
; APPLICANT: Rinella, Joseph
; TITLE OF INVENTION: Protein Formulations
; FILE REFERENCE: X12473A
; CURRENT APPLICATION NUMBER: US/10/170,301
; CURRENT FILING DATE: 2002-06-12
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 28
; TYPE: PRT

; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: MISC_FEATURE
 ; LOCATION: (28)..(28)
 ; OTHER INFORMATION: Xaa = Lys or Lys-Gly
 US-10-170-301-2

Query Match 78.0%; Score 32; DB 4; Length 28;
 Best Local Similarity 30.4%; Pred. No. 1.3;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
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 Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 19

US-10-378-094-7

; Sequence 7, Application US/10378094
 ; Publication No. US20030221201A1
 ; GENERAL INFORMATION:
 ; APPLICANT: PRIOR, Christopher P.
 ; APPLICANT: LAI, Char-Huei
 ; APPLICANT: SADEGHI, Homayoun
 ; APPLICANT: TURNER, Andrew
 ; TITLE OF INVENTION: MODIFIED TRANSFERRIN FUSION PROTEINS
 ; FILE REFERENCE: 54710-5001-01-US
 ; CURRENT APPLICATION NUMBER: US/10/378,094
 ; CURRENT FILING DATE: 2003-03-04
 ; PRIOR APPLICATION NUMBER: US 10/231,494
 ; PRIOR FILING DATE: 2002-08-30
 ; PRIOR APPLICATION NUMBER: US 60/334,059
 ; PRIOR FILING DATE: 2001-11-30
 ; PRIOR APPLICATION NUMBER: US 60/315,745
 ; PRIOR FILING DATE: 2001-08-30
 ; NUMBER OF SEQ ID NOS: 66
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 7
 ; LENGTH: 28
 ; TYPE: PRT
 ; ORGANISM: Artificial sequence
 ; FEATURE:
 ; OTHER INFORMATION: GLP-1 molecule having insulinotropic activity
 US-10-378-094-7

Query Match 78.0%; Score 32; DB 4; Length 28;
 Best Local Similarity 30.4%; Pred. No. 1.3;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
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 Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 20

US-10-215-272-23

; Sequence 23, Application US/10215272
 ; Publication No. US20040002468A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Genzyme Corporation
 ; APPLICANT: Wadsworth, Samuel C.

```
; APPLICANT: Armentano, Donna
; APPLICANT: Gregory, Richard J.
; APPLICANT: Parsons, Geoffrey
; TITLE OF INVENTION: Methods of Treating Diabetes and Other
; TITLE OF INVENTION: Blood Sugar Disorders
; FILE REFERENCE: 2478.2019002 PCT
; CURRENT APPLICATION NUMBER: US/10/215,272
; CURRENT FILING DATE: 2002-08-07
; PRIOR APPLICATION NUMBER: US 60/310,982
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 23
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified GLP-1 molecule; GLP-1 (7-34)
US-10-215-272-23
```

```
Query Match          78.0%; Score 32; DB 4; Length 28;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches      7; Conservative    0; Mismatches    16; Indels      0; Gaps      0;
```

```
Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
          | | || |                ||
Db      1 HAEGTFTSDVSSYLEGQAAKEFI 23
```

RESULT 21

US-10-393-524A-23

```
; Sequence 23, Application US/10393524A
; Publication No. US20040052862A1
; GENERAL INFORMATION:
; APPLICANT: HENRIKSEN, DENNIS BANG
; APPLICANT: HOLST, JENS JUUL
; TITLE OF INVENTION: USE OF GLP FOR THE TREATMENT, PREVENTION, DIAGNOSIS, AND
; TITLE OF INVENTION: PROGNOSIS OF BONE-RELATED AND NUTRITION-RELATED DISORDERS
; FILE REFERENCE: 57736-CIP(46865)
; CURRENT APPLICATION NUMBER: US/10/393,524A
; CURRENT FILING DATE: 2003-03-20
; PRIOR APPLICATION NUMBER: 09/954,304
; PRIOR FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: GB 0022844.5
; PRIOR FILING DATE: 2000-12-07
; PRIOR APPLICATION NUMBER: GB 0029920.6
; PRIOR FILING DATE: 2000-12-07
; PRIOR APPLICATION NUMBER: 60/371,307
; PRIOR FILING DATE: 2002-04-10
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 23
; LENGTH: 28
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic modified
; OTHER INFORMATION: GLP-1 peptide
US-10-393-524A-23
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```
Query Match          78.0%; Score 32; DB 4; Length 28;
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Best Local Similarity 30.4%; Pred. No. 1.3;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAQGTFTSDVSSYLQGEAAKQFI 23

RESULT 22

US-10-716-326-23

; Sequence 23, Application US/10716326

; Publication No. US20040143104A1

; GENERAL INFORMATION:

; APPLICANT: Genzyme Corporation

; APPLICANT: Wadsworth, Samuel

; APPLICANT: Armentano, Donna

; APPLICANT: Gregory, Richard J.

; APPLICANT: Parsons, Geoffrey

; TITLE OF INVENTION: Methods of Treating Diabetes and Other Blood Sugar Disorders

; FILE REFERENCE: 5062CIP

; CURRENT APPLICATION NUMBER: US/10/716,326

; CURRENT FILING DATE: 2003-11-17

; PRIOR APPLICATION NUMBER: US 10/215,272

; PRIOR FILING DATE: 2002-08-07

; PRIOR APPLICATION NUMBER: US 60/310,982

; PRIOR FILING DATE: 2001-08-08

; NUMBER OF SEQ ID NOS: 54

; SOFTWARE: PatentIn version 3.2

; SEQ ID NO 23

; LENGTH: 28

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Modified GLP-1 molecule; GLP-1 (7-34)

US-10-716-326-23

Query Match 78.0%; Score 32; DB 4; Length 28;
Best Local Similarity 30.4%; Pred. No. 1.3;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

[start](#) | [next page](#)

SCORE 1.3 BuildDate: 11/17/2006

SCORE Search Results Details for Application 09757788 and Search Result 20070122_145838_us-09-757-788a-1.rapbn.

Score Home	Retrieve Application	SCORE System	SCORE	Comments /
Page	List	Overview	FAQ	Suggestions

This page gives you Search Results detail for the Application 09757788 and Search Result 20070122_145838_us-09-757-788a-1.rapbn.

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OM protein - protein search, using sw model

Run on: January 23, 2007, 03:23:44 ; Search time 53 Seconds
(without alignments)
85.178 Million cell updates/sec

Title: US-09-757-788A-1
Perfect score: 41
Sequence: 1 HXXGXFTXDXXXXXXXXXXXXXXFXXXXXXXXXXXXXXXXXX 39

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 472558 seqs, 115754422 residues

Total number of hits satisfying chosen parameters: 472558

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : Published_Applications_AA_New:*

- 1: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
- 2: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
- 3: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
- 4: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
- 5: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
- 6: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
- 7: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US11_NEW_PUB.pep:*
- 8: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US60_NEW_PUB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Result No.	Score	Query Match Length	DB	ID	Description	
1	33	80.5	29	7	US-11-055-093-235	Sequence 235, App
2	33	80.5	29	7	US-11-206-903-235	Sequence 235, App
3	33	80.5	30	6	US-10-559-595-221	Sequence 221, App
4	33	80.5	31	6	US-10-559-595-214	Sequence 214, App
5	33	80.5	31	7	US-11-055-093-176	Sequence 176, App
6	33	80.5	31	7	US-11-055-093-177	Sequence 177, App
7	33	80.5	31	7	US-11-055-093-204	Sequence 204, App
8	33	80.5	31	7	US-11-206-903-176	Sequence 176, App
9	33	80.5	31	7	US-11-206-903-177	Sequence 177, App
10	33	80.5	31	7	US-11-206-903-204	Sequence 204, App
11	33	80.5	37	7	US-11-055-093-59	Sequence 59, Appl
12	33	80.5	37	7	US-11-206-903-59	Sequence 59, Appl
13	32	78.0	28	7	US-11-367-692-7	Sequence 7, Appli
14	32	78.0	29	6	US-10-530-125-1	Sequence 1, Appli
15	32	78.0	29	7	US-11-367-692-8	Sequence 8, Appli
16	32	78.0	30	6	US-10-559-595-217	Sequence 217, App
17	32	78.0	30	6	US-10-559-595-218	Sequence 218, App
18	32	78.0	30	6	US-10-559-595-219	Sequence 219, App
19	32	78.0	30	6	US-10-559-595-220	Sequence 220, App
20	32	78.0	30	6	US-10-559-595-226	Sequence 226, App
21	32	78.0	30	6	US-10-559-595-231	Sequence 231, App
22	32	78.0	30	6	US-10-541-526-7	Sequence 7, Appli
23	32	78.0	30	6	US-10-530-125-2	Sequence 2, Appli
24	32	78.0	30	6	US-10-530-125-3	Sequence 3, Appli
25	32	78.0	30	6	US-10-530-125-19	Sequence 19, Appl
26	32	78.0	30	6	US-10-530-125-20	Sequence 20, Appl
27	32	78.0	30	6	US-10-546-303-389	Sequence 389, App
28	32	78.0	30	6	US-10-546-303-390	Sequence 390, App
29	32	78.0	30	6	US-10-546-303-391	Sequence 391, App
30	32	78.0	30	6	US-10-546-303-392	Sequence 392, App
31	32	78.0	30	6	US-10-546-303-393	Sequence 393, App
32	32	78.0	30	6	US-10-546-303-394	Sequence 394, App
33	32	78.0	30	6	US-10-546-303-396	Sequence 396, App
34	32	78.0	30	6	US-10-546-303-398	Sequence 398, App
35	32	78.0	30	6	US-10-546-303-400	Sequence 400, App
36	32	78.0	30	6	US-10-546-303-401	Sequence 401, App
37	32	78.0	30	6	US-10-546-303-407	Sequence 407, App
38	32	78.0	30	6	US-10-546-303-408	Sequence 408, App
39	32	78.0	30	6	US-10-546-303-409	Sequence 409, App
40	32	78.0	30	6	US-10-546-303-410	Sequence 410, App
41	32	78.0	30	6	US-10-546-303-411	Sequence 411, App
42	32	78.0	30	6	US-10-546-303-412	Sequence 412, App
43	32	78.0	30	6	US-10-546-303-416	Sequence 416, App
44	32	78.0	30	6	US-10-546-303-417	Sequence 417, App
45	32	78.0	30	6	US-10-546-303-418	Sequence 418, App
46	32	78.0	30	6	US-10-546-303-420	Sequence 420, App
47	32	78.0	30	6	US-10-546-303-423	Sequence 423, App
48	32	78.0	30	6	US-10-546-303-424	Sequence 424, App
49	32	78.0	30	6	US-10-546-303-430	Sequence 430, App
50	32	78.0	30	6	US-10-546-303-431	Sequence 431, App
51	32	78.0	30	6	US-10-546-303-432	Sequence 432, App
52	32	78.0	30	6	US-10-546-303-433	Sequence 433, App
53	32	78.0	30	6	US-10-546-303-434	Sequence 434, App
54	32	78.0	30	6	US-10-546-303-439	Sequence 439, App
55	32	78.0	30	6	US-10-546-303-440	Sequence 440, App
56	32	78.0	30	6	US-10-546-303-441	Sequence 441, App
57	32	78.0	30	6	US-10-546-303-442	Sequence 442, App
58	32	78.0	30	6	US-10-546-303-443	Sequence 443, App

59	32	78.0	30	6	US-10-546-303-444.	Sequence 444, App
60	32	78.0	30	6	US-10-546-303-447	Sequence 447, App
61	32	78.0	30	6	US-10-546-303-461	Sequence 461, App
62	32	78.0	30	6	US-10-546-303-462	Sequence 462, App
63	32	78.0	30	6	US-10-546-303-463	Sequence 463, App
64	32	78.0	30	6	US-10-546-303-464	Sequence 464, App
65	32	78.0	30	6	US-10-546-303-465	Sequence 465, App
66	32	78.0	30	6	US-10-546-303-466	Sequence 466, App
67	32	78.0	30	6	US-10-546-303-467	Sequence 467, App
68	32	78.0	30	6	US-10-546-303-468	Sequence 468, App
69	32	78.0	30	6	US-10-546-303-469	Sequence 469, App
70	32	78.0	30	6	US-10-546-303-470	Sequence 470, App
71	32	78.0	30	6	US-10-546-303-478	Sequence 478, App
72	32	78.0	30	6	US-10-546-303-479	Sequence 479, App
73	32	78.0	30	6	US-10-546-303-480	Sequence 480, App
74	32	78.0	30	6	US-10-546-303-481	Sequence 481, App
75	32	78.0	30	6	US-10-546-303-482	Sequence 482, App
76	32	78.0	30	6	US-10-546-303-483	Sequence 483, App
77	32	78.0	30	6	US-10-546-303-484	Sequence 484, App
78	32	78.0	30	6	US-10-546-303-485	Sequence 485, App
79	32	78.0	30	6	US-10-546-303-486	Sequence 486, App
80	32	78.0	30	6	US-10-546-303-487	Sequence 487, App
81	32	78.0	30	6	US-10-546-303-495	Sequence 495, App
82	32	78.0	30	6	US-10-546-303-496	Sequence 496, App
83	32	78.0	30	6	US-10-546-303-497	Sequence 497, App
84	32	78.0	30	6	US-10-546-303-498	Sequence 498, App
85	32	78.0	30	6	US-10-546-303-499	Sequence 499, App
86	32	78.0	30	6	US-10-546-303-500	Sequence 500, App
87	32	78.0	30	6	US-10-546-303-501	Sequence 501, App
88	32	78.0	30	6	US-10-546-303-502	Sequence 502, App
89	32	78.0	30	6	US-10-546-303-521	Sequence 521, App
90	32	78.0	30	6	US-10-546-303-522	Sequence 522, App
91	32	78.0	30	6	US-10-546-303-523	Sequence 523, App
92	32	78.0	30	6	US-10-546-303-524	Sequence 524, App
93	32	78.0	30	6	US-10-546-303-525	Sequence 525, App
94	32	78.0	30	6	US-10-546-303-526	Sequence 526, App
95	32	78.0	30	6	US-10-546-303-527	Sequence 527, App
96	32	78.0	30	6	US-10-546-303-528	Sequence 528, App
97	32	78.0	30	6	US-10-546-303-529	Sequence 529, App
98	32	78.0	30	6	US-10-546-303-530	Sequence 530, App
99	32	78.0	30	6	US-10-546-303-538	Sequence 538, App
100	32	78.0	30	6	US-10-546-303-539	Sequence 539, App

ALIGNMENTS

RESULT 1

US-11-055-093-235

; Sequence 235, Application US/11055093

; Publication No. US20060094652A1

; GENERAL INFORMATION:

; APPLICANT: LEVY, ODILE ESTHER

; APPLICANT: HANLEY, MICHAEL R.

; APPLICANT: JODKA, CAROLYN M.

; APPLICANT: LEWIS, DIANA Y.

; APPLICANT: SOARES, CHRISTOPHER J.

; APPLICANT: GHOSH, SOUMITRA S.

; APPLICANT: D'SOUZA, LAWRENCE

; APPLICANT: PARKES, DAVID

; APPLICANT: MACK, CHRISTINE M.

; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
 ; FILE REFERENCE: 18528.740
 ; CURRENT APPLICATION NUMBER: US/11/055,093
 ; CURRENT FILING DATE: 2005-02-11
 ; PRIOR APPLICATION NUMBER: 60/543,407
 ; PRIOR FILING DATE: 2004-02-11
 ; NUMBER OF SEQ ID NOS: 288
 ; SOFTWARE: PatentIn Ver. 3.3
 ; SEQ ID NO 235
 ; LENGTH: 29
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-055-093-235

Query Match 80.5%; Score 33; DB 7; Length 29;
 Best Local Similarity 30.4%; Pred. No. 0.093;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | ||
 Db 1 HAEGTFTSDVSSTLEGQAALFI 23

RESULT 2

US-11-206-903-235

; Sequence 235, Application US/11206903
 ; Publication No. US20060293232A1
 ; GENERAL INFORMATION:
 ; APPLICANT: LEVY, ODILE ESTHER
 ; APPLICANT: HANLEY, MICHAEL R.
 ; APPLICANT: JODKA, CAROLYN M.
 ; APPLICANT: LEWIS, DIANA Y.
 ; APPLICANT: SOARES, CHRISTOPHER J.
 ; APPLICANT: GHOSH, SOUMITRA S.
 ; APPLICANT: D'SOUZA, LAWRENCE
 ; APPLICANT: PARKES, DAVID
 ; APPLICANT: MACK, CHRISTINE M.
 ; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
 ; FILE REFERENCE: 0701-CIP2-0
 ; CURRENT APPLICATION NUMBER: US/11/206,903
 ; CURRENT FILING DATE: 2005-08-17
 ; PRIOR APPLICATION NUMBER: 11/201,664
 ; PRIOR FILING DATE: 2005-08-11
 ; PRIOR APPLICATION NUMBER: 11/055,093
 ; PRIOR FILING DATE: 2005-02-11
 ; PRIOR APPLICATION NUMBER: 60/543,407
 ; PRIOR FILING DATE: 2004-02-11
 ; NUMBER OF SEQ ID NOS: 399
 ; SOFTWARE: PatentIn Ver. 3.3
 ; SEQ ID NO 235
 ; LENGTH: 29
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-206-903-235

Query Match 80.5%; Score 33; DB 7; Length 29;
 Best Local Similarity 30.4%; Pred. No. 0.093;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | ||

Db 1 HAEGTFTSDVSSTLEGQAALFI 23

RESULT 3

US-10-559-595-221

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; Sequence 221, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
; TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 221
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (16)..(16)
US-10-559-595-221
```

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Query Match          80.5%; Score 33; DB 6; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.096;
Matches      7; Conservative    0; Mismatches    16; Indels      0; Gaps      0;
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Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
        | | || |                ||
Db      1 HAEGTFTSDVSSYLEAQAALKEFI 23
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RESULT 4

US-10-559-595-214

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; Sequence 214, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
; TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
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; SEQ ID NO 214
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (16)..(16)
US-10-559-595-214
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Query Match          80.5%; Score 33; DB 6; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.099;
Matches      7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;
```

```
Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
          | | || |                ||
Db      1 HAEGTFTSDVSSYLEAQAAKEFI 23
```

RESULT 5

US-11-055-093-176

```
; Sequence 176, Application US/11055093
; Publication No. US20060094652A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 18528.740
; CURRENT APPLICATION NUMBER: US/11/055,093
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 288
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 176
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-055-093-176
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```
Query Match          80.5%; Score 33; DB 7; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.099;
Matches      7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;
```

```
Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
          | | || |                ||
Db      1 HATGTFTSDVSSYLEGQAALFI 23
```

RESULT 6

US-11-055-093-177

```
; Sequence 177, Application US/11055093
; Publication No. US20060094652A1
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```
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 18528.740
; CURRENT APPLICATION NUMBER: US/11/055,093
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 288
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 177
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (3)
; OTHER INFORMATION: D-Thr
US-11-055-093-177
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```
Query Match          80.5%; Score 33; DB 7; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.099;
Matches      7; Conservative    0; Mismatches    16; Indels      0; Gaps      0;
```

```
Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
          | | || |                ||
Db      1 HATGTFTSDVSSYLEGQAALFI 23
```

RESULT 7

```
US-11-055-093-204
; Sequence 204, Application US/11055093
; Publication No. US20060094652A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 18528.740
; CURRENT APPLICATION NUMBER: US/11/055,093
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 288
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 204
; LENGTH: 31
```

; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-055-093-204

Query Match 80.5%; Score 33; DB 7; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.099;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSTLEGQAALFI 23

RESULT 8

US-11-206-903-176
; Sequence 176, Application US/11206903
; Publication No. US20060293232A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 0701-CIP2-0
; CURRENT APPLICATION NUMBER: US/11/206,903
; CURRENT FILING DATE: 2005-08-17
; PRIOR APPLICATION NUMBER: 11/201,664
; PRIOR FILING DATE: 2005-08-11
; PRIOR APPLICATION NUMBER: 11/055,093
; PRIOR FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 399
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 176
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-206-903-176

Query Match 80.5%; Score 33; DB 7; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.099;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HATGTFTSDVSSYLEGQAALFI 23

RESULT 9

US-11-206-903-177
; Sequence 177, Application US/11206903
; Publication No. US20060293232A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.

```

; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 0701-CIP2-0
; CURRENT APPLICATION NUMBER: US/11/206,903
; CURRENT FILING DATE: 2005-08-17
; PRIOR APPLICATION NUMBER: 11/201,664
; PRIOR FILING DATE: 2005-08-11
; PRIOR APPLICATION NUMBER: 11/055,093
; PRIOR FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 399
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 177
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (3)
; OTHER INFORMATION: D-Thr
US-11-206-903-177

```

```

Query Match          80.5%; Score 33; DB 7; Length 31;
Best Local Similarity 30.4%; Pred. No. 0.099;
Matches      7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

```

```

Qy      1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
          | | || |              ||
Db      1 HATGTFTSDVSSYLEGQAALFI 23

```

RESULT 10

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US-11-206-903-204
; Sequence 204, Application US/11206903
; Publication No. US20060293232A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 0701-CIP2-0
; CURRENT APPLICATION NUMBER: US/11/206,903
; CURRENT FILING DATE: 2005-08-17
; PRIOR APPLICATION NUMBER: 11/201,664
; PRIOR FILING DATE: 2005-08-11
; PRIOR APPLICATION NUMBER: 11/055,093
; PRIOR FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407

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; PRIOR FILING DATE: 2004-02-11
 ; NUMBER OF SEQ ID NOS: 399
 ; SOFTWARE: PatentIn Ver. 3.3
 ; SEQ ID NO 204
 ; LENGTH: 31
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-206-903-204

Query Match 80.5%; Score 33; DB 7; Length 31;
 Best Local Similarity 30.4%; Pred. No. 0.099;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | ||
 Db 1 HAEGTFTSDVSSTLEGQAALFI 23

RESULT 11

US-11-055-093-59

; Sequence 59, Application US/11055093
 ; Publication No. US20060094652A1
 ; GENERAL INFORMATION:
 ; APPLICANT: LEVY, ODILE ESTHER
 ; APPLICANT: HANLEY, MICHAEL R.
 ; APPLICANT: JODKA, CAROLYN M.
 ; APPLICANT: LEWIS, DIANA Y.
 ; APPLICANT: SOARES, CHRISTOPHER J.
 ; APPLICANT: GHOSH, SOUMITRA S.
 ; APPLICANT: D'SOUZA, LAWRENCE
 ; APPLICANT: PARKES, DAVID
 ; APPLICANT: MACK, CHRISTINE M.
 ; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
 ; FILE REFERENCE: 18528.740
 ; CURRENT APPLICATION NUMBER: US/11/055,093
 ; CURRENT FILING DATE: 2005-02-11
 ; PRIOR APPLICATION NUMBER: 60/543,407
 ; PRIOR FILING DATE: 2004-02-11
 ; NUMBER OF SEQ ID NOS: 288
 ; SOFTWARE: PatentIn Ver. 3.3
 ; SEQ ID NO 59
 ; LENGTH: 37
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-055-093-59

Query Match 80.5%; Score 33; DB 7; Length 37;
 Best Local Similarity 30.4%; Pred. No. 0.12;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
 | | || | ||
 Db 7 HAEGTFTSDVSSTLEGQAALFI 29

RESULT 12

US-11-206-903-59

; Sequence 59, Application US/11206903
 ; Publication No. US20060293232A1
 ; GENERAL INFORMATION:
 ; APPLICANT: LEVY, ODILE ESTHER

; APPLICANT: HANLEY, MICHAEL R.
 ; APPLICANT: JODKA, CAROLYN M.
 ; APPLICANT: LEWIS, DIANA Y.
 ; APPLICANT: SOARES, CHRISTOPHER J.
 ; APPLICANT: GHOSH, SOUMITRA S.
 ; APPLICANT: D'SOUZA, LAWRENCE
 ; APPLICANT: PARKES, DAVID
 ; APPLICANT: MACK, CHRISTINE M.
 ; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
 ; FILE REFERENCE: 0701-CIP2-0
 ; CURRENT APPLICATION NUMBER: US/11/206,903
 ; CURRENT FILING DATE: 2005-08-17
 ; PRIOR APPLICATION NUMBER: 11/201,664
 ; PRIOR FILING DATE: 2005-08-11
 ; PRIOR APPLICATION NUMBER: 11/055,093
 ; PRIOR FILING DATE: 2005-02-11
 ; PRIOR APPLICATION NUMBER: 60/543,407
 ; PRIOR FILING DATE: 2004-02-11
 ; NUMBER OF SEQ ID NOS: 399
 ; SOFTWARE: PatentIn Ver. 3.3
 ; SEQ ID NO 59
 ; LENGTH: 37
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-206-903-59

Query Match 80.5%; Score 33; DB 7; Length 37;
 Best Local Similarity 30.4%; Pred. No. 0.12;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
 | | | | | | | | | |
 Db 7 HAEGTFTSDVSSTLEGQAALFI 29

RESULT 13

US-11-367-692-7

; Sequence 7, Application US/11367692
 ; Publication No. US20060205037A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Sadeghi, Homayoun
 ; APPLICANT: Turner, Andrew J.
 ; APPLICANT: Prior, Christopher P.
 ; APPLICANT: Ballance, David J.
 ; TITLE OF INVENTION: Modified Transferrin Fusion Protein
 ; FILE REFERENCE: BIOR-013/02US
 ; CURRENT APPLICATION NUMBER: US/11/367,692
 ; CURRENT FILING DATE: 2006-03-06
 ; PRIOR APPLICATION NUMBER: US 60/658,140
 ; PRIOR FILING DATE: 2005-03-04
 ; PRIOR APPLICATION NUMBER: US 60/663,757
 ; PRIOR FILING DATE: 2005-03-22
 ; NUMBER OF SEQ ID NOS: 129
 ; SOFTWARE: PatentIn version 3.3
 ; SEQ ID NO 7
 ; LENGTH: 28
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-367-692-7

Query Match 78.0%; Score 32; DB 7; Length 28;

Best Local Similarity 30.4%; Pred. No. 0.16;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 14

US-10-530-125-1

; Sequence 1, Application US/10530125
; Publication No. US20060194720A1
; GENERAL INFORMATION:
; APPLICANT: SANWA KAGAKU KENKYUSHO CO.,LTD.
; TITLE OF INVENTION: GLP-1 derivatives and the use
; FILE REFERENCE: JP0304SKK
; CURRENT APPLICATION NUMBER: US/10/530,125
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: JP 2002-299283
; PRIOR FILING DATE: 2002-10-11
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: GLP1(7-35)
US-10-530-125-1

Query Match 78.0%; Score 32; DB 6; Length 29;
Best Local Similarity 30.4%; Pred. No. 0.17;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 15

US-11-367-692-8

; Sequence 8, Application US/11367692
; Publication No. US20060205037A1
; GENERAL INFORMATION:
; APPLICANT: Sadeghi, Homayoun
; APPLICANT: Turner, Andrew J.
; APPLICANT: Prior, Christopher P.
; APPLICANT: Ballance, David J.
; TITLE OF INVENTION: Modified Transferrin Fusion Protein
; FILE REFERENCE: BIOR-013/02US
; CURRENT APPLICATION NUMBER: US/11/367,692
; CURRENT FILING DATE: 2006-03-06
; PRIOR APPLICATION NUMBER: US 60/658,140
; PRIOR FILING DATE: 2005-03-04
; PRIOR APPLICATION NUMBER: US 60/663,757
; PRIOR FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 129
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
; LENGTH: 29
; TYPE: PRT

; ORGANISM: Homo sapiens
US-11-367-692-8

Query Match 78.0%; Score 32; DB 7; Length 29;
Best Local Similarity 30.4%; Pred. No. 0.17;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGQAAKEFI 23

RESULT 16

US-10-559-595-217
; Sequence 217, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
; TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 217
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-559-595-217

Query Match 78.0%; Score 32; DB 6; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.18;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEEQAAKEFI 23

RESULT 17

US-10-559-595-218
; Sequence 218, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
; TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30

; PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 218
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-559-595-218

Query Match 78.0%; Score 32; DB 6; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.18;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEDAQAKEFI 23

RESULT 18

US-10-559-595-219

; Sequence 219, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
; TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 219
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-559-595-219

Query Match 78.0%; Score 32; DB 6; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.18;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLERQAAKEFI 23

RESULT 19

US-10-559-595-220

```
; Sequence 220, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
; TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 220
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-559-595-220
```

```
Query Match          78.0%; Score 32; DB 6; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.18;
Matches      7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;
```

```
Qy      1 HXXGXFTXDXXXXXXXXXXXXXXXFI 23
          | | || |                ||
Db      1 HAEGTFTSDVSSYLEKQAAKEFI 23
```

```
RESULT 20
US-10-559-595-226
; Sequence 226, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
; TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 226
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; FEATURE:
; NAME/KEY: MOD_RES
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; LOCATION: (16)..(16)
US-10-559-595-226

Query Match 78.0%; Score 32; DB 6; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.18;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HVEGTFTSDVSSYLEAQAQAEFI 23

RESULT 21

US-10-559-595-231

; Sequence 231, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
; TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30
; PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 231
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (16)..(16)
US-10-559-595-231

Query Match 78.0%; Score 32; DB 6; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.18;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HEGTFTSDVSSYLEAQAQAEFI 23

RESULT 22

US-10-541-526-7

; Sequence 7, Application US/10541526
; Publication No. US20060189522A1
; GENERAL INFORMATION:
; APPLICANT: Bloom, Stephen R.
; APPLICANT: Ghatei, Mohammad A.
; APPLICANT: Small, Caroline J.
; APPLICANT: Dakin, Catherine L.
; TITLE OF INVENTION: MODIFICATION OF FEEDING BEHAVIOUR

; FILE REFERENCE: AI 9250 US
; CURRENT APPLICATION NUMBER: US/10/541,526
; CURRENT FILING DATE: 2005-07-07
; PRIOR APPLICATION NUMBER: PCT/GB2004/000017
; PRIOR FILING DATE: 2004-01-12
; PRIOR APPLICATION NUMBER: GB 0300571.7
; PRIOR FILING DATE: 2003-01-10
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 30
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-541-526-7

Query Match 78.0%; Score 32; DB 6; Length 30;
Best Local Similarity 30.4%; Pred. No. 0.18;
Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 1 HXXGXFTXDXXXXXXXXXXXXXFI 23
| | || | ||
Db 1 HAEGTFTSDVSSYLEGGAAKEFI 23

RESULT 23

US-10-530-125-2

; Sequence 2, Application US/10530125
; Publication No. US20060194720A1
; GENERAL INFORMATION:
; APPLICANT: SANWA KAGAKU KENKYUSHO CO.,LTD.
; TITLE OF INVENTION: GLP-1 derivatives and the use
; FILE REFERENCE: JP0304SKK
; CURRENT APPLICATION NUMBER: US/10/530,125
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: JP 2002-299283
; PRIOR FILING DATE: 2002-10-11
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 30

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SCORE 1.3 BuildDate: 11/17/2006
